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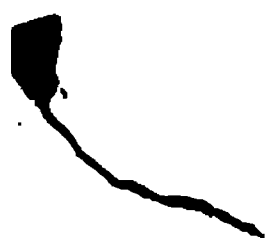
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THE HISTORY OF ECONOMICS

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CONTENTS

	PAGE
PRELIMINARY REMARKS	ix

Book II.

ON THE NATURE AND HISTORY OF ECONOMICS

CHAPTER I.

ON THE METHOD OF INVESTIGATION PROPER TO ECONOMICS.

§ 1. Socrates discouraged the study of Physical Science	3
§ 2. Bacon proclaims the doctrine of the Continuity of Science	3
§ 3. He says that Natural Philosophy is the Mother of all Science	5
§ 4. The Inductive Method applicable to Moral Science	6
§ 5. Physical Inductive Science must precede Moral Inductive Science	6
§ 6. Function of Logic	7
§ 7. Newton and Butler say the same	8
§ 8. The Economists declared that there is a Natural Moral Science	9
§ 9. Generally admitted that Physical Science is the true basis of all Science	10
§ 10. Self-contradiction of John Stuart Mill as to the method of Investigation proper to Economics	10
§ 11. He says that the Inductive is the true method to investigate Economics	12
§ 12. Unanimous opinion that Economics is an Inductive Science	12
§ 13. Self-contradiction of Mill. He says that the <i>à priori</i> method is the only proper one to investigate Economics	13
§ 14. Mill's assertion erroneous	14
§ 15. Mill's reason for asserting that Economics is an <i>à priori</i> Science	16
§ 16. Mill's arguments untenable	17
§ 17. Argument from Feigned Cases	18
§ 18. Experimental and Experiential Philosophy	18
§ 19. The Principles of Inductive Logic applicable to Experiential Philosophy	19
§ 20. Economics admitted to be a Physical Science	19

CHAPTER II.

ON THE NATURE OF A PHYSICAL SCIENCE; AND ON THE FORMATION
OF GENERAL CONCEPTS AND AXIOMS.

	PAGE
§ 1. On the Nature of a Physical Science	20
§ 2. Definition of a Physical Science	20
§ 3. Mechanics	20
§ 4. Chemistry	21
§ 5. Optics and Heat	21
§ 6. Requisites of a Physical Science	21
§ 7. Meaning of a Physical Moral Science	21
§ 8. Not capable of same perfection as Physical Science	22
§ 9. Which Moral Science approaches most nearly to a Physical Science	22
§ 10. How Economics may be made a Physical Science	22
§ 11. An Economic Quantity	23
§ 12. Economic Quantities of divers natures	23
§ 13. Science consists of two parts—General Concepts and General Axioms	24
§ 14. Relation between these and Reality	24
§ 15. Alleged distinction between minds in Science	24
§ 16. The Formation of Concepts and Axioms subject to General Laws	25
§ 17. On the Formation of General Concepts	25
§ 18. On the Formation of General Axioms	29
§ 19. On the Law of Continuity	32
§ 20. Plan of the Work	34

CHAPTER III.

HISTORY OF ECONOMICS.

Erroneous notions as to the origin of the Science of Economics	35
The Theory of Money	36
Foundation of Economics as a Science	40
The Economists	41
*Outline of the Doctrine of the Economists	43
Doctrine of the Economists regarding Commerce or Exchanges	45
Meaning of the expression "Production, Distribution, and Consumption of Wealth"	47
Definition of Wealth by ancient writers	51
Three Species of Wealth or Economic Quantities	52

	PAGE
Demosthenes shows that Personal Credit is Wealth	53
The Roman and Greek Jurists show that Abstract Rights and Rights of Action are Wealth	54
Sketch of the History of the Theory of Credit	57
The Economists on Money	58
The Economists on the Balance of Trade	61
; The Economists on Productive Labour, and on Sterile or Unproductive Labour	62
Dogma of the Economists that Labour and Credit are not to be admitted to be Wealth	63
The Economists founded a New Order of Sciences	66
Reaction against the Economists—Condillac	68
Adam Smith	73
. Free Trade on a Moral and Economical basis	75
. Fallacy of Reciprocity and Retaliation	82
Adam Smith's Definition of Wealth	86
Smith classes Human Abilities or Labour as Wealth	88
Smith admits that Rights are Wealth	88
✓ Confusion of Smith on Value	92
Smith's chief merits	96
His chief defects	97
✓ Ricardo	100
Whately	107
The Economics of Jean Baptiste Say and John Stuart Mill	111
System of J. B. Say	113
John Stuart Mill	120
✓ Mill on Value	128
Reaction against the Economics of Jean Baptiste Say and John Stuart Mill	135
Frederic Bastiat	135
The Author	139
Arthur Latham Perry	154
✓ Stanley Jevons	156
Economics is a Physical Science	161
On the best Name for the Science	164
Economics as a Liberal Science	166

Book II.

THE FUNDAMENTAL CONCEPTS AND AXIOMS OF
ECONOMICS

	PAGE		PAGE
Acceptilation	171	Goodwill	446
Accommodation Paper	179	Gresham's Law	448
Annuity	189	Interest	463
Assignable Instruments	192	Issue	470
Bailment and Debt	193	Labour	471
Balance of Trade	196	Lend—Loan	479
Bank	200	Market Price of Gold and Silver	483
Banking	205	Mint Price of Gold and Silver	484
Bill of Exchange	222	Money	486
Bill of Lading	225	Negative Quantities in Economics	501
Capital	225	Negotiable Instruments	522
Cash Credit	246	Novation	524
Channel of Circulation	256	Patent	526
Cheque	259	Payment and Satisfaction	528
Chose-in-Action	260	Persona	531
Circulating Medium, or Currency	261	Pound? What is a	533
Clearing House	293	Practice	535
Coin	298	Price	536
Compensation	304	Production	539
Confusio	307	Productive and Unproductive Labour	545
Consumption	308	Profit, Rate of	556
Copyright	319	Promissory Note	564
Cost of Production	320	Property	565
Credit	342	Rent	571
Currency Principle	368	Res	608
Debt	370	Rights	609
Deposit	398	Shares in Commercial Companies	619
Depreciation and Diminution in Value	402	Tithes	620
Discount	405	Trade Secrets	621
Distribution	407	Value	621
Dock Warrant	407	Wealth	670
Draft	408		
Estate	409		
Exchange	411		
Farm	426		
Funds, The	426		

PRELIMINARY REMARKS

IF there be one set of men more than another to whom the undying gratitude of mankind is pre-eminently due, it is that illustrious band of thinkers in France, Italy, Great Britain, and Spain, who during the last century founded the Science now usually called Economics, and brought about that great revolution in opinion which, after a long and arduous struggle, finally established the doctrines of Free Trade in this country. Lord Macaulay observes that the two greatest and most salutary social revolutions which have taken place in England, were those which in the thirteenth century put an end to the tyranny of nation over nation, and which, some generations later, put an end to the property of man in man ; but to these may be added a third—not less great, and not less salutary than the other two—that great revolution in the ideas of the age, which abolished for ever the property of one set of men in the industry of others.

But however deep the gratitude which is due to these immortal thinkers, and however warmly we may acknowledge it, it is given to no men, however illustrious, to arrest the progress of thought, and to impose limits upon science. It is the sacred duty of those in succeeding generations who would aspire to walk in their steps, to sift and examine their doctrines by the light of further experience, even as they examined the doctrines of their predecessors, and to carry on the science from where they left it.

It has thus happened that nearly every science has undergone a complete transformation from the mode in which it was conceived by its founders, and there is besides in every science a certain stage

at which it becomes necessary to introduce more powerful and refined methods of investigation, more comprehensive forms of expression, and more minute and exact observations.

Highly as we may esteem the great Economists of this and other countries, it is essential to remember the character of the great Economical contests up to the present time. They have been almost entirely *destructive*. The first Economists found the public mind and the administration infected with an immense mass of rooted prejudices, errors, and abuses. Their first efforts were, therefore, naturally directed to sweep these away; to beat down and abolish false doctrines of all sorts; to extirpate bad and mischievous laws interfering with the natural order of things; to abolish legislative interference with wages, with prices, with the interest of money, and with the commercial intercourse of nations; to establish, in fact, freedom of contract and exchange. And in this Economists of all nations are agreed.

The repeal of the Corn and Navigation Laws in England may be regarded as the consummation of the destructive era of Economical Science in this country. We have now arrived at a new and distinct phase of the Science; that, in fact, at which the period of destruction has ended, and that of construction has come.

With that great practical work before them, which it required three-quarters of a century to accomplish in this country, it is not very surprising that Economists have not hitherto given any very close attention to settle the exact foundations of the Science. The early treatises are filled with long controversies and discussions, which, though indispensably necessary at that time, may now be dismissed in a few lines.

But while Economists of all schools are agreed on what was the destructive portion of their Science, when we come to the positive, or constructive, Science, this agreement is at an end. Nothing can be more lamentable or astonishing than the differences of doctrine and the antagonism of Economists on almost every point in the Science, so as to create a widely-spread impression that there is no such intelligible Science at all as Economics.

It is well known that each of the physical sciences which have attained such magnitude and extent in modern times, and which have produced such admirable results, have been brought to their present state of perfection by extraordinary labour having been bestowed in ascertaining and settling their first elements, namely, their definitions and axioms, or accurate conceptions and expressions of the objects they treat about, and the general laws which regulate their relations to each other.

But it has not always been so. These wonderful sciences were once in a very different state. The modern plan of teaching a science only in its existing state, no doubt imparts a vast amount of actual knowledge. But as a mental discipline, or as a matter of education, the History of Science is of enormous value, and, we venture to say, is far too much neglected.

Many persons can acquire a considerable amount of actual knowledge, and yet derive but little benefit from it. But to study the History of Ideas on the subject, to understand clearly the principles of the different controversies which have been waged, to comprehend why one set of ideas prevailed over another, is an educational exercise of immense utility, which is almost entirely neglected. Few persons are aware of the wrecks of the fierce controversies which lie buried beneath the calm and placid surface of modern Science, like those of mighty armaments beneath the summer sea.

Many persons are apt to think that controversies in Economics are mere logomachy, vain and unprofitable disputes about words, and of no real consequence. They are apt to think that the Physical Sciences treat about things, and Economics only about words, but those who think so display a total want of knowledge of the History of Science. The early history of all sciences is full of controversies about the meaning of words. Many may think that Physical Science being about things, there is no difficulty in giving a name to what is seen so readily. This is a lamentable error. On the contrary, it almost invariably happens that names get into a science, and acquire a position in it, before anyone can give an

exact definition of their meaning. Thus the words *Momentum*, *Vis Viva*, *Uniform Force*, *Accelerating Force*, and several others acquired a position in Mechanics before anyone could tell what they really meant, and all the philosophical world of the day was engaged in the wordy war to settle their meaning, and obtain true definitions: consequently, it is an entire error to suppose that controversies in Physical Science are not about words. On the contrary, it was in the true definitions of words that the whole foundations of the sciences were laid, and it was just because all the great mathematicians of the day so thoroughly understood the supreme importance of ascertaining the true meaning of words, and fought out the meaning of each separate term with such perseverance, that they at length arrived at such an unanimity of agreement, and these controversies have now been almost forgotten. There was a time, then, when what are called the exact sciences had not attained that rank. They were once matters of *opinion*, and not of demonstration, and they only attained the rank of demonstrative truth, because each separate word and each separate principle was thoroughly discussed and settled.

And why has Economics not yet attained the same rank as Mechanics as an exact Science? Because the same care has never yet been given to settle its definitions and axioms. Economics is now like Mechanics in its early stages, overrun and infested with words whose meaning has never yet been settled on certain principles, and which are never almost used by any two writers in the same sense—nay, even none of the most popular writers are consistent with themselves. The men who have cultivated Economics are probably of as great natural ability as those who have cultivated Physical Science, of course with the exception of a few unapproachable examples. Why, then, have they not come to the same unanimity of opinion as their brethren? The simple reason is that they have not adopted the only means which could by any possibility ensure success, namely, a thorough discussion and settlement of the meaning of words. Nay, they have systematically despised it. Now what the words *Momentum*, *Vis Viva*, &c., were to

Mechanics in its early stages, that *Wealth, Value, Currency, Credit, Capital, &c.*, are at the present day to Economics.

And it is for this very reason that many suppose that Economics cannot be made an exact Science, because the only means by which it can be made so have been systematically neglected. Many suppose that there is no need for such a thing: matters will go on just the same, they think, for all the disputes. But the same may be said of Physical Science. A man may be an excellent seaman, and yet be entirely ignorant of the mechanical principles which govern the progress of his ship. But is there no use in the Science of Mechanics? So, doubtless, a man may be an excellent practical banker, and a very successful merchant, without any knowledge of Economics: and yet is there no use in the Science of Economics?

Now Economics is based upon certain fundamental concepts or definitions, and axioms or general laws, just as Mechanics is, and by settling these with as great care as is done in Physical Science, it may be raised to the rank of an exact Science. And yet there are writers—of no mean acquirements, too—who entirely discourage such a course of proceeding; who consider such attempts as pedantic, and mere waste of time; who would admit that in every other branch of human knowledge clear and precise technical terms are absolutely indispensable; and yet, in Economics alone, think that there is no need of anything of the sort.

Besides the nature and extent of the Science itself, and the method of investigation proper to it, the fundamental concepts are *Wealth, Value, Credit, Capital, Production, Consumption, Currency, Money, Price*, and many others. It might naturally have been expected that, as these terms are means by which discussions are carried on, Economists would have been agreed upon all of them.

On the contrary, there is no agreement among Economists upon any one of them. They are entirely at variance with each other, not only as to the nature and extent of the Science, but even as to the method of investigation proper to it. No Economist has, hitherto,

attempted to fix the fundamental concepts of Economics on sure and certain scientific principles, as those of Mechanics have been done. Excellent as are many of their refutations of previous errors, they have never yet made any attempt to give an exposition of the facts of the Science to form the foundation of a theory. Now, as the phenomena of Economics are all produced by the actions of men, if the same care were taken to ascertain these facts and to express their relations in the same accurate and generalised language as is done with regard to those of Physical Science, Economics might be made a science as certain as any Physical Science.

The first thing, then, that is wanted, is to introduce into the Science the spirit of true Generalisation—the generalisation of its fundamental concepts, and the generalisation of its axioms or its general principles, by the acknowledged canons of Inductive Logic.

When Galileo began to study Natural Philosophy, he put aside Mathematics, not thinking that there could be any connection between the two—a sentiment which appears, too, in Bacon. Many persons at the present day think that there is no connection between Economics and Natural Philosophy. They are in just as great an error as Galileo and Bacon were. Economics is a science of causes and effects numerically measured, produced by the properties of men, and its types and standards of reasoning are to be found in the sciences which treat of the causes and effects produced by the properties of material substances. In both equally the Inductive Logic reigns supreme. The same general method of investigation is common to both, and there is the same hope and encouragement to expect success that the Athenian orator gave to his countrymen because their failure arose, not from the nature of the thing, but from their own errors. So it is with Economics. The lamentable state in which it is at present does not arise from the nature of the Science itself, but from its method of treatment.

By paying the same attention as Physicists have done to obtain true concepts and axioms from reality itself by proper methods, and

not by arbitrary dogmatism ; by proceeding step by step, definition by definition, axiom by axiom, principle by principle, in due and proper order ; by maintaining a proper unity of conception and principle from the beginning to the end, it will be found that a vast and magnificent edifice of **Demonstrative** science may be built up. Economics will emerge from the turbid regions of controversy as clear and precise, as sharply defined, and as capable of being erected into an exact science, as any other whatever ; it will attain a grandeur, a precision, and a compass never yet thought of. A new Inductive Science, the connecting link between Physical and Moral Science, will be created, and a new monument raised to the everlasting glory of the Monarch of Philosophy.

Book I.

ON THE NATURE AND HISTORY OF ECONOMICS

CHAPTER I.

ON THE METHOD OF INVESTIGATION PROPER TO ECONOMICS.

SOCRATES—BACON—J. B. SAY—J. S. MILL.

Bacon proclaims the Doctrine of the Continuity of Science.

1. WHEN the greatest Moral Philosopher of antiquity attempted to master the Physical Science of his day, he found that it was a mere chaos of confusion, a mass of baseless dogmatising and vain speculation. He called off his disciples in blank despair from such unprofitable labour, and bade them devote themselves to the study of Moral Science, which was within their comprehension, and to learn just so much of Natural Science as to know when to sow, and to reap, and to sail. Nay, he considered those who engaged in such objects of contemplation as wanting in good sense. He used to inquire whether such persons thought they already knew enough of human affairs before they proceeded to such subjects of meditation. He thought that men could never come to a satisfactory conclusion on such points, because those who most prided themselves on their knowledge were altogether at variance with each other. He asked whether those even who studied celestial phenomena, and discovered the laws which governed all things, fancied they would be able to produce, at their pleasure, wind, rain, changes of the seasons, as men who have learnt mechanical arts can produce what they want. As for himself, he would abandon all such vain speculations, which could never have any practical utility, and turn his attention entirely to moral and civil philosophy, and all things which concerned mankind. Thus Physical and Moral Science were utterly divorced in ancient times, and for twenty centuries it was supposed that there was no connection between them.

2. But our Bacon, greatly wiser—and for this he has never received the thousandth part of the credit that is due to him—had the marvellous sagacity to perceive that in Natural Science are to be

found the types and standards of reasoning which are to guide us in Moral and Political Science. He inculcates the study of Physical Science, it is true, for its own sake, but not for its own sake only, but as the foundation of Moral Science. It is his transcendent merit to have perceived and proclaimed with the voice of a trumpet the grand doctrine of the continuity of the Sciences. And we must be the more earnest in defending the just title of Bacon to this glorious discovery, because the admirers of Auguste Comte have claimed for him the originality of the idea. But we shall shew abundantly that Bacon was the true discoverer of the doctrine. With Physical Science not in a very much better state than it was in the days of Socrates, Bacon not only did not discountenance it, but he had the miraculous sagacity to perceive that the way to true and certain reasoning in Moral Science lay through Physical Science. He complains bitterly of the mutual damage to the Sciences by their separation, and the neglect of Natural Philosophy as the great nursing mother of them all. "And it is a matter of common discourse of the chain of sciences, how they are linked together, in-somuch as the Greeks, who had terms at will, have fitted it of a name of circle-learning. Nevertheless, I that hold it for a great impediment to the advancement and further invention of knowledge that particular arts and sciences have been disincorporated from general knowledge, do not understand one and the same thing, which Cicero's discourse and the note and conceit of the Grecians in their word circle-learning do intend. For I mean not that use which one science hath of another for ornament or help in practice, as the orator hath of knowledge of affections for moving, or as military science may have use of geometry for fortifications; but I mean it directly, of that use by way of supply of light and information, which the particulars and instances of one science do yield and present for the framing or correcting of the axioms of another science in their very truth and notions. And therefore that example of oculists and title lawyers doth come nearer to my conceit than the other two: for sciences distinguished have a dependence or universal knowledge to be augmented and rectified by the superior light thereof, as well as the parts and members of a science have upon the maxims of the same science, and the mutual light and consent which one part receiveth from another. . . . And these are no allusions, but direct communities, the same delights of the mind being to be found not only in music, rhetoric, but in Moral Philosophy, policy, and other knowledges, and that obscure in the one which is more apparent in the other; yea, and that discovered in the one which is

not found at all in the other; and so one science greatly aiding to the invention and augmentation of the other. And therefore without this intercourse the axioms of the sciences will fall out to be neither full nor true.”¹

3. Again, after shewing that one cause of the backward state of the sciences was the short period during which they had been studied, he says—“In the second place there presents itself that cause of great weight in every way, namely, that during those very ages in which the genius and learning of men have chiefly flourished, Natural Philosophy obtained the least part of human labour. And nevertheless this very thing ought to be held to be the great Mother of Sciences. For all arts and sciences if torn from this root, though perhaps they may be polished, and made fit for use, yet they will make no further progress. . . . And the age during which Natural Philosophy was seen to flourish in Greece, was but a very brief interval of time, for both in the more ancient times, the seven who were called the wise men, all except Thales, applied themselves to Moral Philosophy and civil affairs, and in later times when Socrates drew down philosophy from heaven to earth, Moral Philosophy prevailed more and more, and turned the minds of men from the Philosophy of Nature.”² So again—“To this it is to be added that Natural Philosophy, even among those very men, who have nurtured it, has scarcely ever obtained the whole leisure and employment of any one, especially in these later times; except perhaps some instances of a monk in his cell, or a gentleman speculating in his country house. But the Philosophy of Nature has been made as it were a passage and a bridge to something else. And so this great Mother of the Sciences has been with wonderful indignity thrust down to the office of a handmaid. . . . Meanwhile let no one expect much progress in the sciences (especially in the practical part of them) unless Natural Philosophy be applied to each individual science, and each particular science be referred again to Natural Philosophy. Hence it is that astronomy, optics, music, most of the mechanical arts, medicine itself, and—what one might more wonder at—MORAL AND POLITICAL PHILOSOPHY, logical sciences have scarcely any depth, but only glide over the surface of a multitude of things, because, after these separate sciences have been once distributed and erected, they are no longer nourished by Natural Philosophy. Therefore it is not the least strange if sciences make no progress when they are torn from their roots.”³

¹ *Valerius Terminus*, c. 8.

² *Nov. Org.* bk. i. aph. 79.

³ *Nov. Org.* bk. i. aph. 80.

4. So also—"And here it may be repeated what was said above, about the application of Natural Philosophy, and that each separate science must be referred to that again, that the sciences may not be severed and cut off from the trunk. For without this little progress is to be hoped for."¹ And again—"Some, too, may doubt rather than object, whether we speak of Natural Philosophy only, or that the other sciences, logic, ethics, politics, are also to be brought to perfection by the same method. But most assuredly we mean what we said to apply to them all; and as the common logic which acts by syllogism affects not only the natural, but all sciences, so also ours which proceeds by induction, embraces them all. For we form a history, and tables of discovery of anger, fear, shame, and the like, also of examples in Politics, so also of affections of the mind, &c."²

So again—"Let us now come to that knowledge to which the oracle of old leads us—namely, the knowledge of ourselves, upon which, as it touches us the more nearly, the more diligence is to be bestowed. This knowledge is for men, the aim and the object of all knowledges, but it is only a portion of Nature. And let this be laid down as a general rule, that all divisions of sciences be so understood and applied that they may rather mark and distinguish them, than separate and divide them, so that we may always avoid a break of continuity in the sciences. For the contrary mode has made each separate science barren, empty, and erroneous, since they were not nourished, supported, and corrected by the common fountain and aliment."³—"We have laid down that this is the function of Natural Philosophy, to be the common mother of the sciences."⁴

5. It was, then, the matchless and undivided merit of Bacon to discover that the same great fundamental principles of reasoning govern all departments of human knowledge, and that general principles of Logic govern particular sciences with a higher authority than belong to these particular sciences. It has long been observed that the genius of the Platonic Philosophy is essentially Inductive. Only Plato applied the Inductive method to the ideas of the Moral world; Bacon in the first instance to those of the Physical world. But the genius of the Philosophy of each is identical. The sublime discovery of Bacon was that Physical Inductive Science must **precede** Moral Inductive Science: that Natural Science is the nursing mother of all science, and that in it are to be found the types and standards of reasoning to which all other reasoning is to be referred; that it is the *παιδαγωγός* to lead us to the study of Moral

¹ *Nov. Org.* bk. i. aph. 107.

² *De Augmentis*, lib. i. c. 1.

³ *Nov. Org.* bk. i. aph. 127.

⁴ *De Augm.* lib. iii. c. 4.

Science. He proclaimed the union between **Ideas and Reality**, to which nothing earthly was comparable, which was the sole hope of attaining true science, and in consequence of the divorce between them, the whole fabric of human knowledge as then existing was like some magnificent structure without any foundations.

6. It has indeed been the fashion of some writers, lately, systematically to depreciate the merits of Bacon, and some almost seem to go the length of denying him any merit at all, because it cannot be shown that the *Novum Organum* had any direct influence on the progress of physical discovery. He made no discovery himself, and the progress of physical science would have been just as great if he had never written. Even if these assertions were true, it would not in the least diminish the lustre of that work. No one can fairly appreciate the merit of that work who is not well acquainted with the absurdity of the grounds upon which the established opinions of his day rested. Bacon saw through this, and discovered the weakness of the grounds of the current belief with a clearness and penetration truly surprising. One reason, perhaps, why he may not have received his due share of credit is, that he overrated the power of his Logic; and supposed that by its means discoveries could be made, so that almost all minds could be brought nearly to the same level, and make discoveries as equally as they could draw circles by compasses. That he entirely failed in this is true, and it is probable that his failure in that instance has had some effect in making his real merits less thought of than they deserve. But he failed in this instance by not observing his own rules. For he has laid down that the conceptions of a science are to be framed with exactly the same care as the axioms, or general principles. And he fell into exactly the same error himself as he charged upon the Aristotelians, namely, considering Logic as an instrument of discovery. Whereas the fundamental conception of Logic is not the science of *discovering* truth, but the science of *judging* whether or not certain alleged discoveries are true. Logic is the science of *Judgment*, and not an art of discovery, nor even an art of reasoning. The faculty of proposing notions, or ideas, or laws, or reasons, belongs to the *Imagination* or the *Invention*; but all these ideas, conceptions, or laws, must be submitted to the tribunal of the *Reason*, or *Logic*, before they can be finally admitted to be true. And it is the province of Logic to discover and apply the tests which any conception, or axiom, must satisfy before it can be admitted to be true. Cicero has described once, and for ever, the true function of Logic.—“*In hâc arte, si modo est hæc ars,*

nullum est preceptum quo modo verum inveniatur, sed tantum est quo modo JUDICETUR."¹ When, therefore, we separate what falls within the limits of this conception from what transgresses it; when we consider that in his day there was not a single science from which he could draw his observations, there is no candid mind but must be astonished at his penetration and sagacity in anticipating and constructing the Science of Sciences. For the *Novum Organum* is not the science or the art of discovery, but it is the *Theory of Theorizing*, or the *Theory of Generalization*: it is the science and the art of judging and deciding whether the conceptions and the axioms of the various sciences are true. Bacon did something far higher than creating any single science; he CREATED THE SCIENCE OF CREATING SCIENCES. No one can dispute the merit of Aristotle in discovering the syllogistic mode of reasoning, nor can blame him because his injudicious followers pushed it far beyond what he ever intended. But Aristotle founded his system *inductively*: he framed it by observing what examples of reasoning were acknowledged to be valid by common consent. Bacon founded his system *à priori*, with no single instance of an Inductive Science in existence. He made no claim to have created a science, but only to have proclaimed the only true *method* by which a science could be created. And though no doubt additions have been made to Inductive Logic in modern times, yet the amount of success he achieved is truly marvellous. By a curious whim of fortune, the chief of the school of *à priori* reasoners founded his system inductively: the chief of the school of Inductive Logic founded his system *à priori*.

7. And this great discovery, first seen and proclaimed by Bacon, has been repeatedly enforced by the most eminent men since. Thus, Newton says that an extension of our knowledge of the laws of Natural Philosophy would certainly extend our knowledge of the laws of Moral Philosophy. So Bishop Butler says—"There is much more exact correspondence between the natural and the moral world than we are apt to take notice of." And the most celebrated metaphysical writers of the last century held the same doctrine.

8. The earliest school of Economists in modern times acknowledged the same principles. Seeing, as is explained in a subsequent section, the intolerable misery under which their country groaned, a few righteous and generous philosophers struck out the idea that there must be some natural science, some principles of eternal truth, with regard to the social relations of mankind, the violation of which was the cause of that hideous misery which afflicted their native

¹ *De Oratore*, ii. 38.

land. Although they did not in all respects succeed, and were somewhat hasty in laying down general principles, so that in fact they gave their philosophy too much the air of *à priori* dogmatism, they nevertheless acknowledged the doctrine that there is a Natural Moral Science, whence they were called PHYSIOCRATES. But this doctrine was proclaimed with much more earnestness and effect by J. B. Say, the French Economist, who however had read Bacon with such extraordinary carelessness as to say—"The Chancellor Bacon, who was the first to teach that to understand the processes of Nature we must consult, not the writings of Aristotle, but Nature herself, by judicious observations and well-contrived experiments, was entirely ignorant that the same method was applicable to moral and political sciences, and that it would obtain the same success in them!!"¹ Passing over, however, this extraordinary statement, he says:—"In Political Economy, as in Physics, and in everything else, men have made systems before establishing truths; that is, they have published as truth unfounded conceptions and pure assertions. Afterwards they applied to this science the methods which have contributed so much, since the time of Bacon, to the progress of all the others, that is, the method of experiment, which essentially consists in not admitting as true anything of which observation and experience have not proved the reality, and as general truths only such conclusions as naturally flow from them. This entirely excludes those prejudices and those authorities which in science, as in morals, in literature, and in government, intrude themselves between man and the truth."² Again—"The manner how things are and how they happen constitute what is called the *nature of things*, and exact observation of the nature of things is the only foundation of all truth. Thence spring, too, different kinds of sciences: sciences which may be called *descriptive*, which consist in naming and classifying objects, like Botany and Natural History. Then the *Experimental* Sciences, which teach us the reciprocal actions which things exercise upon each other, or, in other words, the connection between effects and their causes, such as Physics and Chemistry. These last require that we should study the very nature of things, because it is by virtue of their nature that they act and produce their effects: it is because it is the nature of the sun to be luminous, and of the moon to be opaque, that when the moon passes before the sun the latter is eclipsed. A careful analysis sometimes is enough to inform us of the nature of a thing: sometimes it is only

¹ *Cours d'économie politique*, vol. ii. p. 550.

² *Traité d'économie politique. Discours Préliminaire*, p. 3.

clearly made known to us by its effects ; and when we cannot devise experiments on purpose, observation is in every case necessary to confirm what analysis can teach us.

“These principles which have guided me will assist me to distinguish two sciences which have been almost always confounded—Political Economy, *which is an experimental science*, and Statistics, which is only a descriptive science.

“Political Economy, as it is studied at present, is entirely founded on facts : because the nature of things is a fact, as well as the result which flows from it. . . . Political Economy is established on impregnable foundations as soon as its fundamental principles are rigorous deductions from general undoubted facts.”

9. We have now, we think, offered ample evidence to shew that the great doctrine discovered and proclaimed by Bacon, that Physical Science is the true basis of all science, was admitted and acknowledged to be true by a long line of illustrious men, and among others by the cultivators of the new science which was rising into existence—Political Economy. How far they succeeded in realizing this conception is quite another matter. The great point was that the principle was admitted, and carried within itself the method of judging and correcting any special errors that might be made in any particular science.

Self-contradiction of John Stuart Mill as to the Method of Investigation proper to Economics.

I.—*Mill says that the Inductive is the only proper Method to investigate Economics.*

10. The doctrine, then, that the same spirit of philosophizing is common to physical and moral science, had now become one of the recognised dogmas of Philosophy. We need not quote others, but we may observe that Mill follows exactly the same strain as the preceding writers. He says—“The backward state of the Moral Sciences can only be remedied by applying to them the methods of Physical Science duly extended and generalized.”¹ And again—“In scientific investigation, as in all other works of human skill, the way of attaining the end is seen, as it were instinctively, by superior minds, in some comparatively simple case, and is then, by judicious generalization, adapted to the variety of complex cases. We learn to do a thing in difficult circumstances by attending to the manner in which we have spontaneously done the same thing in easy ones.

¹ *Logic*, book vi. Table of Contents.

“This truth is exemplified by the history of the various branches of knowledge which have successively, in the ascending order of their complication, assumed the character of sciences, and will doubtless receive fresh confirmation from those of which the scientific constitution is yet to come, and which are still abandoned to the uncertainties of vague and popular discussion. Although several other sciences have emerged from this state, at a comparatively recent date, none now remain in it, except those which relate to man himself, the most complex and most difficult subject of study, on which the human mind can be engaged.

“Concerning the Physical nature of man as an organized being—though there is still much uncertainty and much controversy, which can only terminate by the general acknowledgment and employment of stricter rules of *Induction* than are commonly recognized, there is, however, a considerable body of truths, which all who have attended to the subject consider to be fully established: nor is there now any radical imperfection in the method observed in this department of science, by its most distinguished modern teachers. But the laws of Mind, and even in a greater degree those of Society, are so far from having attained a similar state of even partial recognition, that it is still a controversy whether they are capable of becoming subjects of science in the strict sense of the term; and among those who are agreed upon this point, there reigns the most irreconcilable diversity on almost every other. Here, therefore, if anywhere, the principles laid down in the preceding Books may be expected to be useful.

“If on matters so much the most important with which the human intellect can occupy itself, a more general agreement is ever to exist among thinkers; if what has been pronounced the ‘proper study of mankind,’ is not destined to remain the only subject which philosophy cannot succeed in rescuing from empiricism—the same processes, through which the laws of many simple phenomena have by general acknowledgment been placed beyond dispute, must be consciously and deliberately applied to these more difficult inquiries. If there are some subjects on which the results obtained have finally received the unanimous assent of all who have attended to the proof, and others on which mankind have not yet been equally successful; on which the most sagacious minds have occupied themselves from the earliest date, and have never succeeded in establishing any considerable body of truths, so as to be beyond denial or doubt; it is by generalizing the methods successfully followed in the former inquiries and adapting them

to the latter, that we may hope to remove this blot in the face of Science.”¹

11. In another place Mill has given a more particular exemplification of the analogy between Natural and Moral Science—“Although the scientific arrangements of organic matter affords as yet the only complete example of the true principles of rational classification, whether as to the formation of groups or of series, these principles are applicable to all cases in which mankind are called upon to bring the various parts of any extensive subject into mental co-ordination. They are as much to the point when objects are to be classed for purposes of art or business as for those of science. The proper arrangement, for example, of a code of laws, depends on the same scientific conditions as the classifications in Natural History, nor could there be a better preparatory discipline for that important function than the study of the principles of a natural arrangement, not only in the abstract but in their actual application to the class of phenomena for which they were first elaborated, and which are still the best school for learning their use.”² And again—“These aberrations in medical theory have their exact parallel in politics.”³

12. Here, at last, we might hope that we had attained a solid foundation. The preceding extracts contain as explicit and distinct an acknowledgment as it is possible for language to do, that in Mill's opinion the Science of Society—of which Political Economy is one branch—is to be investigated by methods exactly analogous to those which have already been adopted, and led to such distinguished success in Physical Science, and that the only hope of raising Social Science to the rank of a Demonstrative Science is by doing so. And when Bacon, Newton, Butler, Locke, J. B. Say, Herschell, and Mill are unanimous that Economic Science, as one of the Moral Sciences, is an Inductive Science, we might hope that the question as to the method of investigation proper to it was finally set at rest. We might naturally expect that Mill, who at one time was a disciple of Comte's, and who on this point so clearly maintained the same doctrine, would at last exemplify the doctrine in practice, and give us a treatise on Political Economy, really framed after the manner of a Physical Science, consciously and deliberately.

¹ *Logic*, bk. iv. c. 8, § 5.

² *Logic*, bk. v. c. 6, § 5.

³ *Logic*, bk. vi. c. 1.

II.—*Mill says the à priori is the only proper Method to investigate Economics.*

13. What, then, is our astonishment to read :—"With the consideration of the definition of a science is inseparably connected that of the philosophic method of the science ; the nature of the process by which its investigations are to be carried on, its truths to be arrived at.

"Now, in whatever science there are systematic differences of opinion—which is as much as to say in all the Moral or Mental Sciences, and in Political Economy among the rest ; in whatever science there exist, among those who have attended to the subject, what are commonly called differences of principle, as distinguished from differences of matter of fact, or detail—the cause will be found to be a difference in their conceptions of the philosophic method of the sciences." ¹ Also :—"In the definition we have attempted to frame of the Science of Political Economy, we have characterised it as essentially an *abstract* science, and its method as the method *à priori*. Such is undoubtedly its character as it has been understood and taught by all its most distinguished teachers. It reasons, and as we contend it must necessarily reason, from assumptions, not from facts. It is built upon hypotheses, strictly analogous to those which, under the name of definitions, are the foundations of the other abstract sciences." ² Again :—"This ought not to be denied by the Political Economist. If he deny it, then, and then only, he places himself in the wrong. The *à priori* method which is laid to his charge, as if his employment of it proved his whole science to be worthless, is, as we shall presently shew, the only method by which any truth can possibly be attained in any department of the Social Science!!" ³ Also :—"But we go farther than to affirm that the method *à priori* is a legitimate mode of philosophical investigation in the Moral Sciences—we contend that it is the only mode. We affirm that the method *à posteriori*, or that of specific experience, is altogether inefficacious in these sciences as a means of arriving at any considerable body of valuable truth ; though it admits of being usually applied in aid of the method *à priori*, and even forms an indispensable supplement to it." ⁴

14. Now, we simply place these extracts before our readers, and ask—Is it not astonishing that they should proceed from the same writer, who enjoys a reputation as a logician ?

¹ *Essays upon some unsettled questions of Political Economy*, p. 141.

² *Ibid.* p. 143.

³ *Ibid.* p. 145.

⁴ *Ibid.* p. 146.

“Can such things be,
And overcome us like a summer's cloud,
Without our special wonder?”

We shall postpone the consideration of the reasons alleged by Mill for maintaining this extraordinary doctrine, so plainly contradictory to what he himself had set forth in the previous extracts, until we have examined his assertion as to a matter of fact. He asserts that *all* the most distinguished Economists have treated it as an *a priori* science. We have already shewn that this assertion is utterly contrary to fact. J. B. Say, as we have shewn, expressly declares it to be an *experimental* science, and says that it is entirely founded on facts, and so far from sanctioning the *a priori* method of treating Political Economy, he expressly condemns those who do so. He says:—“Other considerations not less delicate relate to what precedes. Some writers of the eighteenth century, and of the dogmatic school of Quesnay, as well the English Economists of the school of David Ricardo, without employing algebraical formulæ evidently inapplicable to Political Economy, have wished to introduce into it a kind of reasoning, which as a general rule all sciences reject, which acknowledge no foundations but experience, I mean reasoning which rests on abstractions. . . . When we admit as a basis, instead of a well-observed fact, a principle which is only founded on disputation, we are in danger of imitating the schoolmen of the Middle Ages, who disputed about words instead of discussing facts, and who proved to be quite beside the truth.”¹ And he gives instances where he considers, and in one at least justly, Ricardo and McCulloch to have fallen into error by adopting this method, and he dwells on the mischief produced in the Science by adopting this method. Speaking of Quesnay, he says:—“Instead of first observing the nature of things—namely, the way in which things really happen, classifying observations and educing general principles from them—they began by laying down abstract generalities, which they called Axioms, and which they taught were absolutely self-evident. They then tried to bring particular facts into accord with them, and deduced rules from them. This entangled them in the defence of maxims evidently contrary to good sense, and to the experience of ages.”² While fully acknowledging their excellence as men, and also the real services they performed to the State, he says:—“But, on the other hand, the Economists did harm by decrying several useful maxims, by making it be thought by their sectarian spirit, by the dogmatic and abstract language of most of their writings, by their

¹ *Traité d'économie politique*, p. 15.

² *Ibid.* p. 24.

oracular tone, that all those who employed themselves in such researches were only dreamers, whose theories, however good they might seem in books, were inapplicable in practice.”³ He then points out that Adam Smith pursued exactly the opposite method—namely, the inductive method of educing principles from facts:—“When we read Smith as he deserves to be read, we perceive that there was no Political Economy before him.” Again:—“Before Smith many true laws had been brought forward. He was the first to shew why they were true. He did more: he has given the true method of pointing out errors: he has applied to Political Economy the new method of treating the Sciences, in not searching out their principles abstractedly, but in going to facts most constantly observed, to the general laws of which they are a consequence. As soon as a fact may have a cause, the spirit of system decides that it is the cause. The analytical spirit wishes to know why such a cause produces such an effect, and to satisfy itself that it could not have been produced by any other cause. Smith’s work is a collection of demonstrations which have raised many propositions to the rank of undoubted principles, and have plunged a greater number in the gulf where vague ideas and hypotheses, extravagant imaginations, struggle a short time, before being swallowed up for ever.”

Thus we see that Mill’s assertion that *all* the most distinguished Economists have considered Political Economy as an *à priori* science, and have treated it so, is entirely disproved. Whether we agree on all points with Say is another matter, but every one must admit him to be a distinguished Economist, and we see plainly that he not only declares, in the most emphatic language, that it is an experimental and an inductive science, but he condemns by anticipation the very doctrines Mill has put forth in the extracts given above, and points out the mischievous effect they had already produced. We entirely concur in and adopt these views of Say. So far from *all* the most distinguished Economists having adopted the *à priori* method, it is only Ricardo and his followers who have done so in this country, and, as we shall shew in the subsequent part of this work, with the most pernicious consequences.

15. Having thus shewn that Mill is completely in error in his allegations of fact, and contradictory to himself on the method of investigation proper to the subject, we shall now examine the reasons he alleges for his last-mentioned doctrine. He says—“There is a property common to almost all the moral sciences, and by which they are distinguished from many of the physical; that is,

³ *Ibid.* p. 25.

that it is seldom in our power to make experiments in them. In chemistry and natural philosophy, we can not only observe what happens under all the combinations of circumstances which nature brings together, but we may also try an indefinite number of new combinations. This we can seldom do in ethical and scarcely ever in political science. We cannot try forms of government, and systems of national policy, on a diminutive scale, in our laboratories ; shaping our experiments as we think that they may most conduce to the advancement of knowledge. We therefore study Nature under circumstances of great disadvantage in these sciences, being confined to the limited number of experiments which take place (if we may so speak) of their own accord, without any preparation or management of ours, in circumstances, moreover, of great complexity, and never perfectly known to us, and with the far greater part of the processes concealed from our observation.

“The consequence of this invariable defect in the materials of this induction, is that we can rarely obtain what Bacon has quaintly, but not inaptly, termed an *experimentum crucis*.”¹ Also—“Since, therefore, it is vain to hope that truth can be arrived at, either in Political Economy or in any other department of the Social Science, while we look at the facts in the concrete, clothed in all the complexity with which Nature has surrounded them, and endeavour to elicit a general law by a process of induction from a comparison of details ; there remains no other method than the *à priori* one, or that of abstract speculation.”²

16. And that this opinion is no hasty or ill considered one, is evident, because Mill repeats the very same argument in his later work—“We have thus already come within sight of a conclusion which the progress of the inquiry will, I think, bring before us with the clearest evidence, namely, that in the sciences which deal with phenomena, in which artificial experiments are impossible (as in the case of Astronomy), or in which they have a very limited range (as in Physiology, Mental Philosophy, and the Social Science) ; induction from direct experience is practised at a disadvantage generally equivalent to impracticability, from which it follows that the methods in these sciences, in order to accomplish anything worthy of attainment, must be, to a great extent, if not principally, deductive. This is already known to be the case with the first of the sciences we have mentioned, astronomy ; that it is not generally recognised as true of the others, is probably one of the reasons why they are

¹ *Essays upon some unsettled questions in Political Economy*, p. 146.

² *Ibid.* p. 148.

still in their infancy.”¹ And we must protest against Mill’s doctrine —“The deductive method, which in the present state of knowledge is destined henceforth irrevocably to predominate in the cause of scientific investigation. A revolution is peaceably and progressively effecting itself in Philosophy, the reverse of that to which Bacon has attached his name. That great man changed the method of the sciences from deductive to experimental, and it is now rapidly reverting from experimental to deductive.”² Of this doctrine we shall have something more to say hereafter.

17. Mill’s reason, therefore, for maintaining in exact opposition to what he had done before, that Political Economy is not an Inductive Science, is that it is not possible to perform an unlimited number of experiments in it, as may be done in some physical sciences. The slightest reflection will show that this argument is quite untenable. It is not possible to perform experiments in Mental Philosophy, yet all the most distinguished cultivators of Psychology in modern times, have unanimously declared it to be an Inductive Science. It is not possible to perform experiments in Comparative Philology, and yet, Max Müller strenuously urges that Comparative Philology is a physical Inductive Science. And it certainly would be most monstrous to declare that Comparative Philology is an *à priori* science. The power of performing experiments at will is by no means an *essential* feature of an Inductive Science, though, no doubt, it gives enormous advantages in some cases. It is rarely possible to perform experiments in Geology, yet if any one were to maintain that Geology is an abstract *à priori* science, few people now-a-days would care to listen to such a person. Mill’s example of astronomy is scarcely relevant, because modern astronomy is undoubtedly founded on induction, and is only a branch of mechanics, which is certainly an Inductive Science. And there are many other sciences to which the preceding remarks are applicable. It is perfectly true that in Economics it is not generally possible to make experiments, except by those at the head of the State. We may therefore at once admit that a solitary inquirer has not the power of making an unlimited number of arbitrary experiments, and that he can only watch by direct observation those performed by the State, and these will be found to be amply sufficient for the purpose. But in Economics and the Moral Sciences generally—we can have what are in all respects equivalent to experiments—namely **Feigned Cases**. It is perfectly well known that when the application of a legal principle is doubtful, it is customary to *feign a*

¹ *Logic*, bk. iii. c. 7, § 3.

² *Logic*, bk. iii. c. 13, § 7.

case, for the purpose of clearing up doubtful points, and the same is true of the Moral Sciences generally, and gave rise to the great Science of **Casuistry**, or Cases of Conscience. We can argue from feigned cases, and educe principles from them, with exactly the same degree of certainty as if they were real cases; and also with the same degree of certainty as principles are tested by real experiments in experimental science.

18. But there is one point which must be particularly attended to, in arguing from feigned cases, drawn from the very analogy of experiments. The feigned cases devised for the purpose of eliciting principles must be possible. An experiment from its very nature is a possible combination of circumstances. Now in Economics or in any Moral Science, no true principle can be elicited from an *impossible* case. It is not possible to predicate any result at all in such a case. Nor is this palpable truth of small importance. Writers who have adopted the *à priori* method have often argued from feigned cases, but they have not always observed this rule. We may cite one conspicuous example of the violation of this principle. In some attempts that have been made to show that an increase of the currency can have no effect in increasing the production of wealth, but would only raise the price of existing commodities, it is sometimes argued in this way—"Suppose," it is said, "people were to awake some morning, and find all their money doubled in quantity, what would be the effect? Simply that the prices of all commodities would be doubled." But the answer to this mode of arguing is, that it is an impossible case, and no principle can be educed from such a case. It is not possible that such a thing should happen, and all results attempted to be deduced from such an example must be discarded as futile. If we would educe principles of any worth from a supposed case of the doubling of the quantity of the currency, we must strictly suppose it to be doubled in the way it would *really* happen.

19. There are then two great divisions of Inductive Science—Physical and Moral, both absolutely identical in their genius, both to be followed and cultivated by the same method. Now Physical Inductive Science often receives a name from the character of the method by which its general laws, or axioms, are proved, that is by observation and *Experiment*, and from this it is often called **Experimental Philosophy**. Now it seems to be of advantage to have a distinctive name for Moral Inductive Science, or that great branch of Inductive Science, whose axioms are tested by observation and *feigned cases*, or human *Experience*, and the name of

Experiential Philosophy seems not inappropriate. Hence we have Inductive Science divided into two great provinces, Physical and Moral, which may be respectively called Experimental and Experiential Philosophy, and then we have this principle—What *Experiments* are to *Experimental Science*, *possible Feigned Cases* are to *Experiential Science*.

20. As soon as we admit this, it follows that the whole of that great body of Inductive Logic, the foundations of which were so widely and grandly and securely laid by Bacon, and to which many additions and extensions have been made, as new principles of Inductive Logic were evolved in the gradual formation of the various Inductive Sciences, for the purpose of framing conceptions, and testing axioms or general principles, by due experiments, is applicable to frame the conceptions and axioms of Experiential Science by properly devised feigned cases, if experiments cannot be had. Thus we have only to substitute “feigned cases” for “experiments” throughout, and we obtain an Inductive Logic for Experiential Philosophy.

21. Economics, then, being admitted to be a Physical Science, we have next to inquire what is the nature of a Physical Science, and what are the indispensable methods necessary to be observed to build up and erect a great Inductive Science of Economics on solid and durable foundations?

CHAPTER II.

ON THE NATURE OF A PHYSICAL SCIENCE ; AND ON THE FORMATION OF GENERAL CONCEPTIONS AND GENERAL AXIOMS.

1. As it is now generally admitted that Economics is a Physical Science, and is to be constructed in a manner analogous to that in which the various Physical Sciences have been constructed, it will be of advantage to make some general remarks on the nature of a Physical Science, and to lay down some general principles of reasoning which will assist us to decide various controversies in Economics which we shall have to consider.

2. A Physical Science is the body of laws which govern the phenomena relating to some single idea, or quality, of the most general nature appertaining to material substances ; and whatever material quantity possesses that quality is an Element in that science, no matter what other qualities it possesses.

Thus, every substance which possesses divers qualities will be an element in as many sciences as it has qualities. And single qualities may exist in quantities of the most divers natures. It thus happens that in every science there are elements of divers forms and natures.

Thus the science of Arithmetic, or Algebra, is the science of number or measure ; and, consequently, whatever can be numbered or measured is an Arithmetical or Algebraical, Quantity. Thus quantities of the most divers natures are brought under the dominion of Arithmetic or Algebra, simply from their capability of being measured.

Thus time, space, velocity, material substances of all sorts, which have no other property in common but the capability of being measured, are all Arithmetical or Algebraical Quantities.

3. So the Science of Mechanics in its most general form treats of Forces. And these Forces are of the most divers forms and natures, and agree in nothing except that their effects can be measured.

The general definition of Force in Mechanics is—*Anything which causes, or tends to cause, motion.*

Thus some forces are material and corporeal, such as men, animals, &c. Others are incorporeal, invisible, and intangible, like gravity, electricity, magnetism, &c. Other forces are explosives, like gunpowder, &c. There is also the force of the wind, steam, and others.

Now, all these forces of the most divers natures are all Mechanical Quantities, because they all satisfy the mechanical definition of Force.

4. So Chemistry is the science of the combination of molecules, and there are bodies of divers forms, solid, liquid, and aeriform.

5. So in Optics and Heat, we have to consider how all sorts of bodies or substances, solid, liquid, or aeriform, affect Light, or are affected by Heat.

6. Now, as these are all experimental sciences, or sciences of causes and effects, the fundamental condition of any body of phenomena being capable of being erected into a science is that some method must be discovered of *measuring* the effects. Thus Heat could never have been erected into a science without the invention of the thermometer.

The whole certainty of the belief in Physical Science rests upon this, that the Creator has impressed or endowed material substances with certain fixed, uniform, and unchangeable qualities, and that similar causes will always produce similar effects or phenomena, and when once the laws which govern the phenomena are ascertained by observation and experiment, and truly expressed in accurate language, we are always able to predict the consequences or effects that will follow from definite causes.

7. Now if there be, as is asserted, a Moral Philosophy composed of a number of distinct Moral Sciences, as Physical Philosophy is composed of distinct Physical Sciences, what can it mean? And how is a Moral Science to be created on the analogy of a Physical Science?

It can only mean this—That man, like physical substances, is endowed with divers moral qualities, properties, or passions, such as Hope, Fear, Anger, Shame, Desire, Resentment, &c. Certain causes acting upon these different passions, or qualities, produce effects in men. Now, if these passions or qualities were as uniform and invariable in men as the properties or qualities are in physical substances, and if the same causes produced the same effects uniformly and invariably on each of these qualities in men, and

if any means could be discovered of measuring these effects—if, in short, we could invent a *THUMOMETER*, as well as a *THERMOMETER*—then each of these qualities or passions might be made the subject of a distinct Moral Science, as certain as a Physical Science, and we should have a body of Moral Philosophy as certain as, and analogous to, Physical Philosophy.

8. Men, however, it is well known, are not endowed with these moral qualities in the same uniform and invariable manner that physical substances are. A person deeply conversant with human nature may, no doubt, prognosticate the effects that will be produced on masses of men by certain causes, and on this knowledge of human nature is founded the power of the Statesman, the Orator, and the Poet. But it is not certain that each separate man will be amenable to these influences. It is a common observation that it is much easier to know human nature in general than any man in particular. It is also well known that these effects produced in men are not capable of any numerical measurement. Though, therefore, it is undoubtedly true that the general principles of reasoning are the same in Moral as in Physical Science, yet, from the want of uniformity in the properties or passions, and the impossibility of devising a means of measuring their effects, they are not capable of being carried to the same state of perfection as the Physical Sciences.

9. Nevertheless, if there be any Moral Science founded on any quality of men which prevails, and has prevailed, among men of all ages, countries, and varieties, with the same uniformity and invariability as the qualities of physical substances do—and more especially if its effects can be measured numerically—such a Moral Science may be erected into a science closely approximating to the precision and the certainty of a Physical Science: and a Moral Inductive Science may be created by observing the phenomena relating to that quality, and following the same course of generalizing the Laws which govern these phenomena, in all respects analogous to a great Physical Inductive Science.

10. Now, Political Economy, or Economics, is declared to be a Moral Science and an Inductive Science, and it is contended that it is to be constituted and erected into a science in the same manner as a Physical Science. What can this mean? and how is this to be done?

It is perfectly well agreed now by all Economists that Economics is the Science which treats of things so far as they are *Wealth*. It is the science which treats of the Laws which govern the phenomena of wealth.

Now, without inquiring yet what wealth is, and what that quality of things is which constitutes them "Wealth," we may lay down these preliminary considerations which must govern the course of the inquiry, and the method of constructing the science. The quality which constitutes things "Wealth," must be some SINGLE quality of the most general nature; and the Science of Wealth must be the science of the phenomena resulting from that quality.

11. Following the analogy of Physical Science, we may lay this down, that whatever quality that may be defined to be which constitutes a thing Wealth—without at present in the slightest degree anticipating what it may be—we may say that in whatever that quality may be found to exist—it must be technically WEALTH, whatever its nature be, and whatever other qualities it may possess. Arguing from the strictest analogy of Physical Science, we may say that *whatever* satisfies the Economic definition of Wealth, is an Economic Quantity, or Wealth—whatever other qualities it may possess. And Economics treats exclusively of the phenomena relating to that quality, and takes no notice whatever of any other qualities the quantity may possess, or of the phenomena relating to them. Just as we may consider man purely as a mechanical force, and without reference to any other qualities he may possess, moral or physical.

12. So much for the general conception of the science. We have to search for, and ascertain what that quality is which constitutes things Wealth, and then we have to search for and discover all the different species of quantities which satisfy that definition.

Thus, with respect to glass, diamonds, oils, and other things, we know the qualities which bring them under the dominion of Chemistry, Optics, Heat, Electricity, &c., but what is that quality which brings them under Economics, or makes them Economic Quantities?

Now, arguing from the general analogy of Physical Science, and without in the least anticipating any controversies we may hereafter find to prevail on the subject, we may say that we may naturally expect that there will be found to be quantities of several divers and distinct natures which will satisfy the Economical definition of Wealth, and consequently be Economic Quantities. And it is clear that we must take care to search for and ascertain all these different species of quantities, because if we omit any, those conceptions and principles which may be founded on contemplating only certain species will probably be found to be partial and erroneous, and not true as general conceptions and general laws, and they will vitiate

the results obtained. It is infinitely better to commence at first by ascertaining that we have included *all* species in our Conceptions and Axioms, than afterwards to have to pull down, widen, enlarge, and re-construct our system from careless omissions in the first instance.

Thus we see clearly the nature of a science. Our future object will be to discover to what body of phenomena the name of Political Economy, or Economics, is applicable.

*On the Formation of General Concepts and General Axioms,
or General Principles.*

13. The nature of a science being thus determined, the next point is to construct it, or to discover the laws which govern its phenomena, or in other words to be able to explain the phenomena.

Every science consists of two parts—1st, General Concepts or Definitions, or a due classification of the quantities it treats about, and 2ndly, the Laws which govern their relations, called by Bacon, Newton, and many others, Axioms or General Principles.

14. By that mysterious correlation which holds between reasoning and reality, it is invariably found that if concepts of things are framed which are true to nature, and results are calculated according to reasoning which is also true to nature, they will be found to correspond to reality. That is, if true Concepts are framed, and truly reasoned about, results may be *predicted*. But if results are calculated, and it is found that they do not correspond to nature, but are palpably and notoriously erroneous, then we are immediately certain that either the concept or the reasoning must be erroneous.

15. Bacon says that there is a great and almost radical distinction between minds in regard to Philosophy and Science; that some are more apt to perceive the difference of things, and others the resemblances. This distinction, though often insisted upon as fundamental, will perhaps, appear to be less radical if we consider that to do each accurately, depends upon the same general power of the mind, namely, that of separating complex terms into their elementary ideas, and discerning which are the subordinate ones. When the leading qualities in quantities are identical, they must be classed together, even although some of the subordinate ones are opposite. On the other hand, when the leading properties are opposed, there is a fundamental distinction between the quantities, even though some of the subordinate ones are similar. Thus the

same general analytical power of the mind enables us to annihilate spurious identities, and also to detect latent similarities. Now, all true classification, which is as much as to say all true science, is based upon perceiving fundamental analogies beneath superficial differences, and fundamental distinctions beneath superficial resemblances.

16. Now, the formation of Definitions, or Concepts, is not arbitrary, or dependent on the will of the writer. Their formation as well as that of Axioms, or General Laws, is strictly subject to certain general Philosophic Laws.

We may state two canons of fundamental importance :—

- I. The Fundamental Concepts and Axioms of every Science must be perfectly general.*
- II. No General Concept and no General Axiom, must contain any term, involving more than one Fundamental Idea.*

The truth of this latter canon is manifest, because if any term involve more than *one* fundamental idea, it limits the Concept or Axiom, which is contrary to the first canon.

Consequently, if we wish to bring Economics to the state of an exact science, we must carefully examine all its fundamental Concepts and Axioms, and reduce them to the state of generality and simplicity, required by the above canons. Hence, if we meet with Concepts and Axioms which violate them by containing several ideas, we must apply the general principles of Inductive Logic to discover which is the true general idea, and eliminate all other accidental, particular, or intrusive ideas.

On the Formation of General Concepts.

17. Socrates, says Aristotle, was the first to frame general definitions, because he saw that all systematic reasoning must be based upon definitions; and every philosopher of note, from that day to this, has repeated the same thing. The chief charge alleged by Bacon against the Logic of the schools was, that it was wholly incapable of penetrating the recesses of nature. "The Syllogism consists of propositions, propositions of words, but words are the tokens and signs of Concepts. So that, if the very conceptions of the mind (which are, as it were, the soul of words and the foundation of this superstructure and edifice) are badly and inconsiderately formed from the facts, vague, nor sufficiently definite and limited, faulty in short in every way, it ruins every thing."¹

¹ *Distributio Operis.*

Over and over again he repeats that the formation of Concepts, or Definitions, and Axioms, or General Laws, by true induction is the only way of expelling fallacies. So, in affirming that the Concepts and Axioms of his own day were utterly worthless, he says :—"The discoveries already made in the sciences are of such a sort as scarcely to be below the surface of the vulgar notions ; but, in order to penetrate to the deep recesses of nature, both Concepts and Axioms must be derived from facts, by a more certain and guarded method."¹ Again :—"The formation of Concepts and Axioms, by a true induction, is assuredly the true remedy to drive away and expel fallacies. And of those fallacies, the fallacies of language (*Idola fori*), which men gain from one another by common discourse, are the most troublesome of all. For the ill and unfit choice of words wonderfully obstructs the understanding. For words plainly exert a power over the understanding, and throw everything into confusion, and lead men away into numberless empty controversies and phantasies ; for men believe that their understanding controls their language, but it is also true that language re-acts and turns back its power over the understanding, which is the very thing which has rendered philosophy and the sciences sophistical and inactive. But words are commonly framed by the capacity of the vulgar, and divide things according to the lines which are most obvious to the minds of the vulgar. And whenever a clearer intellect and a more careful observation wishes to shift these lines to a truer agreement with nature, words cry out against it. Thus it happens that great and important discussions of learned men often turn into controversies about words and names, with which, according to the wise custom of mathematicians, it would be more prudent to begin, and so bring them into order by Definitions."²

Again—"The formation of ideas or true Concepts and Axioms by true induction is, no doubt, the proper remedy to be applied for the keeping off and clearing away fallacies. To point them out is of great use ; for the doctrine of fallacies is to the interpretation of nature what the doctrine of the refutation of sophisms is to common Logic."³ Also—"The fallacies which words impose upon the understanding are of two sorts. They are either names of things which do exist, but are confused and ill defined, and hastily and irregularly formed from the facts. And this class which is formed by a bad and unskilful abstraction is intricate and deeply rooted."⁴

¹ *Nov. Org.* bk. i. aph. 18.

³ *Nov. Org.* bk. i. aph. 40.

² *Nov. Org.* bk. i. aph. 89.

⁴ *Nov. Org.* bk. i. aph. 60.

—“And the assistance of this induction is to be used, not only in discovering general laws, but also in the formation of concepts. And assuredly in this induction the chief hope lies.”⁴

Bacon then places the foundation of all science in the extirpation of Fallacies (Idols) and the obtaining true general Concepts (Ideas) from nature and reality itself by genuine induction, which are not to be fanciful fictions of the mind. He maintains that Concepts are to be obtained in the same manner as Axioms or General Laws. But he has not given any examples of his method, nor indeed was it possible that he should do so. No Logic can shew how it can be done. It is the part of Imagination, or Invention, to devise and suggest fundamental conceptions, and of Logic to determine whether they be true or not. The Baconian method of induction has been far more generally applied to General Laws than to Concepts. From whence some have drawn the conclusion that his method is practically useless. We hope that we shall be able to shew that this is not so, but that the Baconian, or Inductive, Logic may be applied with decisive effect in determining the controversies which prevail up to the present hour as to every single General Concept in Economics.

And most men eminent as clear thinkers since the days of Bacon have dwelt upon the importance of true conceptions. Thus Hobbes says—“In the right definition of names lies the first use of speech, which is the acquisition of science. And in wrong or no definitions, lies the first abuse from which proceed all false and senseless tenets.” And again—“Every man who aspires to true knowledge should examine the definitions of former authors, and either correct them, or make them anew.”¹

One of the most valuable parts of Locke's Essay, is that in which he dwells upon and enforces the necessity of accurate general terms, and the importance of refining and polishing common language for philosophical purposes. And he especially notes the mischievous consequences that follow from the inconstant use of them—“It is hard to find a discourse written upon any subject, especially of controversy, wherein one shall not observe, if he read with attention the words (and those commonly the most material in the discourse and upon which the argument turns) used sometimes in one collection of simple ideas, and sometimes for another, which is a perfect abuse of language. Words being intended for signs of my ideas to make them known to others, not by any natural signification, but by a voluntary imposition, it is plain cheat and abuse, when I make

¹ *Nov. Org.* bk. i. aph. 105.

² *Leviathan*, pt. i. c. 4.

them stand sometimes for one thing and sometimes for another ; the wilful doing whereof, can be imputed to great folly, or greater dishonesty.”¹ Again — “Knowledge and reasoning require precise determinate ideas. The multiplication and obstinacy of disputes, which have so laid waste the intellectual world, is owing to nothing more than to this ill use of words. For though it is generally believed that there is great diversity of opinions, in the volumes and variety of controversies the world is distracted with, yet the most I can find that the contending learned men of different parties do, in their arguings one with another, is, that they speak different languages.”² Locke then says that by proper attention being paid to language, Moral Science may be reduced to demonstration. — “Upon this ground it is, that I am bold to think that Morality is capable of demonstration, as well as mathematics ; since the precise real essence of the things moral words stand for may be perfectly known. . . . And, therefore, the negligence and perverseness of mankind cannot be excused, if their discourses in morality be not much more clear than those in Natural Philosophy. . . . Yet this, the least that can be expected, that in all discourses, wherein one man pretends to instruct or convince another, he should use the same word constantly in the same sense ; if this were done, which nobody can refuse without great disingenuity, many of the books extant might be spared : many of the controversies in dispute would be at an end, several of these great volumes, swollen with ambiguous words now used in one sense, and by and bye in another, would shrink into a very narrow compass.”³ How true all this is of Economics, any one who has read the subject can tell !

So also Mill perfectly acknowledges in a general way the importance of true conceptions. “How to define a name may not only be an inquiry of considerable difficulty and intricacy, but may involve considerations going deep into the nature of the things which are denoted by the name.”⁴ Again — “Few people have reflected how great a knowledge of things is required to enable a man to affirm that any given argument turns wholly upon words. There is, perhaps, not one of the leading terms of philosophy which is not used in almost innumerable shades of meaning, to express ideas more or less widely different from one another. Between two of these ideas a sagacious and penetrating mind will discern, as it were intuitively, an unobvious link of connection, upon which, though perhaps unable to give a logical account of it, he will found a

¹ *Essay*, bk. iii. c. 10, § 5.

² *Essay*, bk. iii. c. 2, § 16, 17, 26.

³ *Essay*, bk. iii. c. 10, § 22.

⁴ *Logic*, bk. i. c. 8, § 7.

perfectly valid argument, which his critic, not having so keen an insight into the things, will mistake for a fallacy turning on the double meaning of a term. And the greater the genius of him who safely leaps over the chasm, the greater will probably be the crowing and vain glory of the mere logician who, hobbling after him, evinces his own superior wisdom by pausing on its brink, and giving up as desperate his proper business of bridging it over.”¹ And concluding the chapter, he says—“And since upon the result of this inquiry respecting the causes of the properties of a class of things, there incidentally depends the question what shall be the meaning of a word, some of the most profound and most valuable investigations which philosophy presents to us have been introduced by, and have offered themselves under the guise of inquiries into the definition of a name.”²

After so distinctly recognizing the importance of true definitions, it might naturally be expected that Mill should bestow extraordinary care on the ascertainment and settlement of the Fundamental Concepts of Economics, the obscurity and confusion of which, every one knows, have given rise to the greater part of the controversies in the subject. But just as in the former case, where Mill, after having amply acknowledged that Moral Science is to be cultivated in the spirit and method of Physical Science, when he comes to Economics in particular, turns his back upon himself, and maintains that it is an *à priori* science; so here, after amply acknowledging the importance of true Philosophical Concepts, when he comes to Economics he says—“It is no part of the design of this treatise to aim at metaphysical nicety of definition, where the ideas suggested by a term are already as determinate as practical purposes require.”³ But what definition in Economics is as determinate as practical purposes require? Not a single one! And in a subsequent chapter we shall see how contradictory are many of Mill’s definitions.

On the Formation of General Axioms.

18. Having obtained General Concepts or Definitions of Quantities treated about, our next purpose is to discover the General Law which governs their relations to each other, and in searching for this, we must observe that, there can be but ONE General Theory at the basis of all phenomena. In particular classes of cases, there may undoubtedly be other circumstances which may aggravate, neutralize, or overpower, and seemingly reverse the

¹ *Logic*, bk. i. c. 8, § 7.

² *Logic*, bk. i. c. 8, § 7.

³ *Pol. Econ.* p. 2.

General Theory ; but for all that, it is there, and acts universally. In several different sciences no doubt different General Theories have prevailed, such as in Astronomy, Optics, Heat, Electricity, &c. ; but no Physical Philosopher ever dreamt of explaining every different class of phenomena by a distinct theory. No one ever thought of writing a book on Astronomy, in which one chapter was written on the Ptolemaic Theory, another chapter on the Copernican Theory, and another chapter on Tycho Brahe's Theory. No one ever thought of writing a book on Optics, one part of which was based upon the Emission Theory, and another on the Wave Theory of Light, and so on of the other sciences. It has always been clearly understood that there could be but ONE General Theory which governed all phenomena, though liable to be modified by disturbing causes in particular cases. And the business of the Physical Philosopher has always been to discover which is the true General Theory ; and the grand business of the Baconian, or Inductive, Logic, has been to discover and lay down the principles which are to decide which is *the* true Theory. In politics, no doubt, we require the spirit of compromise, and many contradictions are tolerated for the sake of general peace. But in science, toleration and compromise are impossible. It is always a mortal combat between rival theories. All but one must perish ; and it is the business of Inductive Logic to pronounce the doom of Life or Death.

Now without even yet determining what Economics is, we may lay this down, that if it be a Physical Science, as is so often asserted, there can be but ONE General Theory of the relations between Economic Quantities. To break up Economic phenomena into distinct classes of cases, and to maintain that there is a distinct fundamental Theory, or Axiom, or Law, governing each class of cases, would be utterly abhorrent to the fundamental principles of Natural Philosophy.

Bacon gives abundant precepts for the determination of the truth of rival theories, and he enforces the necessity of carefully devised experiments (and in the Moral Sciences possible feigned cases), and the attention necessary to contrive a variety of them, and to extend the inquiry generally. "For no one successfully investigates the nature of a thing in the thing itself." And he advises us to imitate the Divine Wisdom, which in the first day created light only. So we must endeavour to gather from all sorts of experience, and to discover true causes and general principles, and to devise "*experimenta lucifera*" for this purpose, or instances contrived with the express view of testing general principles before we go to practice.

For he says that all true knowledge consists in knowing true causes, and that which in Theory is the cause, in Practice is the rule. "For though we are chiefly in pursuit of the practical and active part of science, we must wait for the time of the harvest, and not reap the moss or the green corn. For we well know that general principles, once rightly discovered, will carry whole troops of works with them, and will produce effects not in single instances, but in multitudes."¹

Some writers of eminence, indeed, seem to think that Bacon has neglected too much, or even omitted, the deductive part of science, or the explanation of phenomena by general principles. But we cannot agree to this. He has clearly and repeatedly asserted that his Philosophy consists, *first*, of the eliciting general conceptions and general axioms from particular cases—the Inductive part—the *ascending* to abstract principles from concrete cases; and, *secondly*, the *descending* part, or the application of general principles, so obtained by Induction, to the explanation of phenomena. "Axioms duly and orderly formed from particulars, easily discover the way to new particulars, and thus render sciences active."²—"The true method of experience, on the contrary, first lights the candle, and then by means of the candle, shews the way; commencing as it does with experience duly ordered and digested, not bungling or erratic, and from it educing Axioms, and from established Axioms again new experiments."³—"From the new light of Axioms, which, having been educed from these particulars by a certain method and rule, shall in their turn point out the way again to new particulars, greater things may be looked for. For our road does not lie on a level, but *ascends* and *descends*; first ascending to Axioms, then descending to works."⁴—"And the truth is that the knowledge of simple natures well examined and defined is light; it gives entrance to all the secrets of nature's workshop, and virtually includes and draws after it whole bands and troops of works, and opens to us the source of the noblest axioms."⁵

It clearly appears, therefore, that *Deduction* was not only an essential part of the Baconian Philosophy, but its very aim and object, because it was the *practical* part of it. The very aim of Bacon was, by discovering true science or the knowledge of causes, to be able to govern the world of reality, or effects. To say, therefore, that Bacon omitted the Deductive part is manifestly as great an error as that of J. B. Say, who declared that Bacon was quite

¹ *Distributio Operis*.

² *Nov. Org.* bk. i. 84.

³ *Nov. Org.* bk. i. aph. 121.

⁴ *Nov. Org.* bk. i. aph. 24.

⁵ *Nov. Org.* bk. i. aph. 103.

ignorant that the method of his Philosophy was applicable to anything but Physical Science. Mill is, therefore, also in error when he says that a revolution in science is peaceably taking place, and that we are reverting from the Inductive to the Deductive method. Even if it were true, it is not a revolt from, but the express fulfilment of, the Baconian Philosophy. And we think the example Mill has selected peculiarly unfortunate, because the practical triumphs of the astronomer are entirely due to the Theoretical, or Inductive, discovery of the fundamental Laws of Mechanics. Astronomy is nothing whatever but a practical example of the general laws of Mechanics, and is the most sublime proof of the truth of the Baconian Philosophy.

12. One of the great fundamental Laws of Inductive Logic pervading every part of the *Novum Organum*, and expressing its very spirit, is called the *Law of Continuity*, and is thus described by Whewell, *Nov. Org. Renov.* p. 221:—

“A quantity cannot pass from one amount to another by any change of conditions, without passing through all the intermediate magnitudes, according to the intermediate conditions.”

“This Law may often be employed to correct inaccurate deductions, and to reject distinctions which have no real foundation in nature. For example: The Aristotelians made a distinction between motion according to nature (as that of a body falling vertically downwards) and motion contrary to nature (as that of a body moving along a horizontal plane); the former they held became naturally quicker and quicker, the latter naturally slower and slower. But to this it might be replied that a horizontal line may pass by gradual motion through various inclined positions to a vertical position, and thus the retarded motion may pass into the accelerated; and hence there must be some inclined plane on which motion is naturally uniform, which is false, and therefore the distinction of such kinds of motion is unfounded.” That is to say, there is no point whatever at which one kind of motion passes into another. Again:—“The evidence of the *Law of Continuity* resides in the universality of those Ideas, which enter into our apprehension of Laws of Nature. When of two quantities one depends upon the other, the Law of Continuity necessarily governs the dependence. Every philosopher has the power of applying this Law, in proportion as he has the faculty of apprehending the Ideas which he employs in his Induction, with the same clearness and steadiness which belong to the fundamental Ideas of Quantity, Space, and Number. To those who possess this faculty, the Law is a rule of very wide and decisive application. Its

use, as has appeared in the above example, is seen rather in the disproof of erroneous views, and in the correction of false propositions, than in the invention of new truths. It is a test of truth rather than an instrument of discovery"¹—which, we may observe, is the true function of all Logic, both Aristotelian and Baconian—formal and inductive.

The Law of Continuity is one of the most powerful weapons of Inductive Logic, and is of very wide application in Physical research. It has been employed with immense effect in settling the fundamental conceptions of Mechanics, Electricity, Geology, and indeed of every other science. Its capability of being applied to settle the fundamental Concepts and Axioms of Economics has never yet, that we are aware of, even been suspected! And yet we shall shew that it is capable of absolutely deciding and determining once and for ever, the greater portion of the controversies in Economics.

The great philosophers who founded the Physical Sciences instinctively obeyed the Laws of the Baconian, or Inductive, Logic, which are undoubtedly true in the main. In fact this Logic, must have been necessarily evolved in the process of the formation of those sciences. Because in all controversies it is necessarily assumed that there is some supreme power which is admitted to be capable of deciding authoritatively on all scientific discussions, which must be yielded to by both parties, or else there is no prospect or possibility of bringing the discussions to a final end. And that supreme power is the REASON, the Divine ΛΟΓΟΣ, or LOGIC—the common property of GOD and MAN.²

“ Know that in the soul
Are many lesser faculties that serve
REASON as chief ; among these Fancy next
Her office holds ; of all external things,
Which the five watchful senses represent,
She forms imaginations, eary shapes,
Which Reason, joining or disjoining, frames
All which we affirm or what deny, and call
Our knowledge or opinion ; then retires
Into her private cell, when Nature rests.
Oft in her absence mimic Fancy wakes
To imitate her ; but, misjoining shapes,
Wild work produces oft—
Ill matching words and deeds.”

The wonderful sagacity of Bacon was that he anticipated this natural process, and first created that science of sciences, which rules every particular science with supreme power. All controversies in

¹ WHEWELL, *Nov. Org. Renov.* p. 223. ² CICERO, *de Legibus*, bk. i. § 5.

Economics, both as to Concepts and Axioms, must be brought to the tribunal of this supreme power, and must be decided by the same general principles of Inductive Logic, as have already decided finally the controversies in Physical Science.

20. We shall endeavour in the following chapter to show the application of the principles we have been considering. In the first Book we shall give a narrative of the differences of opinion as to the History of the Ideas that have prevailed as to the nature and scope of the science of Economics itself, and employ the principles of Inductive Logic to determine which is the true one. We shall then frame a Definition, or precise Conception of the Science, expressing the body of phenomena, whose laws it is our business to discover.

The second Book investigates the Fundamental Concepts of the Science, and brings together various controversies and discussions which have been held on each of them, and shows the application of Inductive Logic to determine which are the true General Concepts.

This completes the Inductive, or Theoretical, portion of the Science, in which true Concepts and Axioms are obtained by genuine Induction from Nature itself.

CHAPTER III.

HISTORY OF ECONOMICS.

It was until very recently an assured opinion in this country that Adam Smith was the founder and creator of the Science of Political Economy—or Economics, as it is now more usually termed—and of Free Trade. A once prominent politician is reported to have said that Political Economy and Free Trade sprang perfect and complete from the brain of Adam Smith, as Minerva did from the head of Jupiter. Such ideas, however, show a complete ignorance of the history of Economics, and are now quite abandoned by all persons who have studied the subject.

In fact, it is contrary to nature that it should have been so. Great sciences are not created at once by a single book. They invariably arise from small beginnings, just as the mighty Danube flows from a spring in the garden of a German burgher. Some men begin to observe the phenomena connected with some single fundamental concept. Then other observers bring in a larger number of phenomena based upon the same fundamental concept; and so at last, by the contributions of an increasing number of observers, it grows into a great science, just as the Danube, from a tiny spring, is swollen into a mighty river by multitudinous contributory streams.

Every one with a scientific instinct can at once perceive that Adam Smith's work is pervaded with a combative air; that every part of it is evidently written *at* something preceding, and that it is intended to overthrow a prior system.

As a matter of fact, as we shall presently show, Economics was founded as a Science by an illustrious sect of philosophers in France in the middle of the last century, who were the first to perceive and declare that there is a positive and definite Science of Economics, based upon demonstrative reasoning, just as the various physical sciences are.

The Science of Economics, like medicine, has arisen out of the

calamities and misery of mankind, caused by the violation of true Economic principles; and every advance in Economic theory has originated in some great pressing practical evil.

The Theory of Money.

The first department of Economics to be reduced to scientific principles, and established on solid and enduring foundations, was the Theory of Money.

Charlemagne, about the end of the eighth century, founded the system of coinage which was adopted in all the countries of Western Europe. The coinage of the Romans had fallen into great disorder, and Charlemagne adopted the French pound weight of silver as the unit, and divided it into 240 *deniers*, or pennies, 12 of which were called a *solidus*, or shilling, in account; and twenty *solidi* made a pound. For a considerable time the French sovereigns maintained the standard, but every petty count and proprietor claimed the right of coining on his own account, and deluged the country with base and degraded coin. Louis VI. seems to have been the first sovereign to issue a very debased coinage, and this was constantly done by succeeding kings. They claimed the right of issuing debased coin and diminishing the weight of the standard coin as much as they pleased, and forcing their subjects to accept the debased and diminished coin at the same value as good coin. Moreover, they complicated matters by introducing a gold coinage in the twelfth century, and they claimed the right of changing the weight of the coins, and their rating with respect to each other, as often as they pleased, so that whenever they had debts to pay they cried the coin up, and when they had debts to receive they cried the coin down. In my *Dictionary of Political Economy*, Art. "Coinage of France," p. 509, I have given a table of the variations in the Mint prices of the marcs of gold and silver from the year 1113 to the revolution.

Philip le Bel was especially notorious for these evil practices, and was singled out by Dante as a false coiner.¹

"Li si vedra il duol che sopra Senna
Induce falseggiando la moneta."

*There shall be seen the woe that he shall pour
Along the Seine by uttering coin debased.*

These evil practices were adopted in every country in Europe and were called *morbus numericus*. They became worse than ever under the disastrous reign of John. Between 1351 and 1360, the

¹ *Paradiso*, canto xix.

rating of the livre, or pound, was altered 71 times. The State was in the lowest depression when Charles V., justly surnamed the Wise, succeeded to the Crown. He perceived that the shameful state of the coinage had been the cause of innumerable commotions and misery, and had driven away foreign trade from the country, and that the only way to bring back prosperity was to restore the coinage. He referred the whole matter to one of his wisest and most trusted councillors, Nicolas Oresme, afterwards Count Bishop of Lisieux, who, in answer to the appeal of his Sovereign, produced about 1366 his now justly celebrated Treatise on Money, entitled, *Traictie de la première invention des Monnoies*, in twenty-six chapters, which may be justly said to stand at the head of modern Economic literature. This treatise laid the foundations of Monetary Science, which are now accepted by all sound Economists. Thus to France is due the honour of having produced the first great treatise on an Economical subject. But Oresme's treatise was merely a Report addressed to his Sovereign, and did not become public.

These evil practices continued to flourish in all countries in Europe. They were carried to less extremes in England than in any other. In 1526, Sigismund I., King of Poland, of which Prussia then formed a part, being anxious to restore the coinage of Prussia, which had fallen into great disorder, applied to Copernicus, who was a member of the Prussian Diet, and he drew up a masterly treatise on Money, entitled, *Monetæ cudendæ Ratio*, which was only discovered in 1815, and has been included in the magnificent edition of his works published at Warsaw in 1854.

Copernicus had no knowledge of Oresme's treatise, written 160 years before his own, but he came to exactly the same conclusions as Oresme had done. They both held that the Prince, or the Law, had no power to regulate the relative value of gold and silver; that the sole duty of the Prince is to maintain the weight, the purity, and the denomination of the coins; to change either of them is robbery. That in regulating the relative value of the coins, the Law must strictly conform to the relative market value of the metals. For the coins are only pieces of bullion impressed with a stamp to certify their weight and fineness, and the changes in their relative value must follow the changes in the relative value of the metals. That bad coin and good coin cannot circulate together, but the bad coin invariably drives out the good coin from circulation, and alone remains current. That if the legal ratio of the coins does not conform to the relative market value of the metals, the coin which is underrated disappears from circulation; it is either hoarded away,

or it is melted down into bullion, or it is exported. That attempting to maintain coins in circulation at a legal ratio differing from the relative market value of the metals, only enures to the benefit of the bullion dealers, who buy up and melt down the underrated coin, to the great loss of the community. Oresme said that if the Prince can regulate the value of gold and silver, he can regulate the value of everything else; and Copernicus said that there cannot be more than one measure of value in a country, any more than there can be more than one measure of length, weight, or capacity. That if good new coin is to be issued from the Mint, all the bad, base, and degraded coin must first be withdrawn from circulation, or the value of the good coin will become debased, and it will at once disappear from circulation.

In England the sovereigns had never debased the purity of the coins, except during a short period by Henry VIII., Mary, and Edward VI.; but they had successively diminished their weight. They allowed vast quantities of base and counterfeit foreign coin to circulate in the country, and even the native coin to be clipped and degraded. They never took any measures to withdraw the base and degraded coin from circulation before issuing the good coin. The consequence was, that all the good coin disappeared from circulation as soon as it was issued from the Mint. This phenomenon was the puzzle of financiers and statesmen, and gave rise to numerous debates in Parliament. But they could devise no remedies except denouncing penalties of death and mutilation against persons who melted down and exported the good coin. They had no Oresme or Copernicus to explain to them the true causes of this, and, as they never discovered the true master-secret of the case, their measures were wholly ineffectual.

At last, Sir Thomas Gresham explained to Queen Elizabeth that allowing base and degraded coin to circulate along with good coin *caused* it to disappear; that bad coin and good coin cannot circulate together; but that the bad coin invariably and necessarily drives out good coin from circulation, and alone remains current. Seeing the immense importance of this Law, I suggested, in my *Elements of Political Economy*, p. 477, published in 1857, that it should be known by the name of "**Gresham's Law**," and this suggestion has now been universally accepted.

But in 1864 my friend, M. Wolowski, published the *Treatises* of Oresme and Copernicus, by which it appeared that these great men had fully explained the matter 160 and 32 years respectively previous to Gresham, so that this great Law, which is as well and

firmly established as the Law of Gravitation, should be called the Law of Oresme, Copernicus, and Gresham.

This Law may be stated in the following terms :—

“The worst form of currency in circulation regulates the value of the whole currency, and drives all other forms of currency out of circulation.”

This was the first great fundamental Law established in Economics, and it is now recognized that it governs all discussions on Money and Coinage.

Oresme and Copernicus had laid down that the legal ratio between gold and silver coins should strictly conform to the market ratio of the metals, and that the ratio of the coins should never be changed, except in consequence of a change in the market ratio of the metals. But it was found impossible to follow this rule in practice. The ratio between gold and silver sometimes rose above, and sometimes fell below, the legal ratio; and it was found that when these fluctuations took place, the metals alternately drove each other out of circulation as they rose above or fell below the legal ratio. And how was it possible to be constantly calling in and recoining the money according to every change in the market ratio of the metals? At the close of the seventeenth century Sir William Petty, one of the most scientific men of the age, and Locke, in a masterly and unanswerable treatise, shewed that **one** metal only should be adopted as the standard unit and measure of value, and coins of other metals should be only subsidiary to the standard, and should only be allowed to be current at their market value in relation to that standard. This doctrine was enforced in the middle of the last century by Harris, and was fully developed in the great master treatise on the subject, the unanswered and unanswerable *Treatise on the Coins of the Realm*, by Lord Liverpool, published in 1805, to which the Government of India, after forty years of bitter experience of attempting to keep gold and silver coins in circulation at a fixed legal ratio, declared their entire adhesion in 1806, and which was finally adopted in this country at the great recoinage in 1816; and England now enjoys the most perfect system of coinage ever devised by the ingenuity of man. Every country in Europe has seen that the British system of coinage is the only true one, and has followed it.

This was the first great Law of Economics, which was established before the foundation of Economics as a Science by the Economists.

Foundation of Economics as a Science.

For many centuries all Governments enacted laws regarding trade without suspecting that there are any fixed principles on the subject. Sometimes they favoured Free Trade, sometimes Protection ; sometimes they cockered up one species of industry, sometimes another, according to the whim of the moment, or according as they thought that one species of industry was the most advantageous for the country. They never seem to have had the faintest idea that the only true principle is to leave every industry alone, and allow each one to develop itself according to its own natural tendencies.

At length, in the fulness of time, the sublime conception of Bacon was realised, and a new order of sciences came into existence—the Sciences of Society.

Every one has heard of the glories of the reign of Louis XIV., but few, probably, have any idea of the terrible reaction and the incredible disasters and misery at the close of his reign. These may be learnt from contemporary writers, and also from Taine's *History of the Ancient Regime*, and many other works. Before his death, John Law, whose scheme of Paper Money had been rejected by the Scottish Parliament in 1705, came to France, and endeavoured to induce Desmaréts, the Minister of Finance, to adopt it ; but Desmaréts would have nothing to do with it, and Law was ordered to quit France. Soon after the death of Louis XIV. Law went back to France, and persuaded the Regent Orleans to allow him to found a Bank. Now Law was not a rogue and a swindler, as is too often thought. Barring his unfortunate theory of Paper Money, he was the most consummate financier of the age. He addressed fifteen letters on Banking and Credit to the Regent Orleans, which are perfectly sound, and shewed that he understood the nature of Credit and Banking better than any one else of his day. The Regent accordingly allowed him to establish his Bank, and it was a marvellous success. In three years he raised France from the lowest state of misery and depression to the height of prosperity, so that foreign nations sent to congratulate the Regent upon the restored condition of France. Now Law has explained his whole theory in a work, *Money and Trade Considered*. He thoroughly understood the powers of Credit, but he saw that the powers of Credit are limited, and he wished to create a Paper Money beyond the limits of Credit. His ideas seem very plausible, and have been adopted in several countries ; but they have invariably produced the most frightful

catastrophes, because they are in direct violation of the fundamental concept of Monetary Science (**Money**). It would be quite impossible to give any account of the Mississippi scheme here, but I have given a full account of Law's banking career in my *Dictionary of Political Economy*, Art. *Banking in France*. This catastrophe in France was not only important in itself, but was the origin of the foundation of Economics as a Science.

In 1749 Turgot, then a young man of twenty-two, began to reflect upon this terrible calamity, and endeavoured to discover the error of Law's system, and the nature of Credit, in a letter to the Abbé de Cicé, in which he did not succeed—which is not surprising, as he knew nothing of the Pandects of Justinian, in which the whole Juridical Theory of Credit is set forth. Turgot associated with himself Gournay, who was an eminent merchant, and a keen advocate of Free Trade. They enlisted Quesnay, the King's physician, Le Trosne, Mirabeau *père*, the Abbé Baudeau, Mercière de la Rivière, Dupont de Nemours, and many others, who formed themselves into a powerful sect, under the name of the Economists. These men were the first to perceive and declare that there is a positive and definite Science of Economics, founded upon demonstrative reasoning, just as the physical sciences are.

They found France divided into a number of separate and semi-independent provinces, each surrounded with custom houses, which were an intolerable barrier and obstruction to commercial intercourse; every species of industry was loaded with minute and oppressive legislation, and on the slightest infraction of these regulations, the manufactures were destroyed by the Government inspectors; a very large portion of the human race was groaning under the bonds of slavery; and in every country persons were relentlessly persecuted for their religious opinions.

The Economists held that these Commercial, Personal, and Religious oppressions were contrary to the fundamental rights of mankind. They proclaimed as the indefeasible rights of mankind the **Freedom of Person**, the **Freedom of Opinion**, and the **Freedom of Commerce**, or **Exchange**.

Quesnay, who was the real head of the sect, and the founder of Economics as a Science, and his followers, reflecting on the intolerable misery they saw around them, struck out the idea that there must be some great Natural Science, some principles of eternal truth, founded in Nature itself, with regard to the social relations of mankind, the violation of which was the cause of the hideous misery they saw around them in their native land. The name which

Quesnay first gave to it was Natural Right ; and his object was to discover and lay down an abstract science of the natural rights of men in all their social relations towards Government, towards each other, and towards **Property**. The term *Politique* in French might have expressed this science, but the word in common usage was so exclusively appropriated to the art of Government, that they gave it the name of "Political Economy," or Economical Philosophy," and hence they took the name of the "**Economists**." Dupont de Nemours, one of their number, proposed the name of *Physiocratie*, or the government of the nature of things, and hence they came to be called also the *Physiocrates*; but the word having been appropriated to certain doctrines of the sect which are now shewn to be erroneous, and abandoned by all Economists of repute, has fallen into disuse, and the term Political Economy, or Economics, which is now more generally used, has survived.

Now it is evident that this wide and extensive scheme comprehends not only a single science, but a whole multitude of sciences, and we shall henceforth confine ourselves strictly to that department of their philosophy which relates to **Commerce**, or **Exchanges**.

The sect of the Economists was constituted in 1750. Quesnay's first publication, *Le Droit Naturel*, contains a general inquiry into these natural rights ; and he afterwards, in another work called *Maximes Générales du Gouvernement Economique d'un Royaume Agricole*, endeavoured to lay down, in a series of thirty maxims, or general rules, the whole basis of the economy or organisation of society.

The 23rd of these maxims declares that a nation suffers no loss by trading with foreigners.

The 24th declares the fallacy of the Balance of Trade (**Balance of Trade**).

The 25th says : "*Let entire freedom of commerce be maintained; for the regulation of commerce, both internal and external, the most sure, the most exact, the most profitable to the nation, and to the State, consists in entire freedom of competition.*"

In every country in Europe there were numerous enlightened persons who advocated Free Trade as beneficial ; but the Economists were the first to lay it down as one of the fundamental rights of mankind, and as the corner-stone of their Science. These maxims were adopted as a Code by the sect, and were published in 1759 as the embodiment of their doctrines, which at once disposes of the idea that Adam Smith was the originator and creator of Free Trade. The Maxims of Quesnay entirely overthrew the prevailing system of

Economics. This was the work of Quesnay and his associates; and, notwithstanding certain errors and shortcomings mentioned below, they are unquestionably entitled to be acknowledged as the founders of Economics and Free Trade.

Outline of the Doctrine of the Economists.

We may now give a brief abstract of the doctrine of the Economists, by which they vindicated the principle of liberty, and the right of property.

The Creator has placed man upon the earth with the evident intention that the race should prosper; and there are certain physical and moral laws which conduce, in the highest degree, to ensure his preservation, increase, well-being, and improvement. The correlation between these physical and moral laws is so close, that if either be misunderstood, through ignorance or passion, the others are also. Physical nature, or matter, bears to mankind very much the relation which the body does to the mind. Hence the perpetual relation of physical and moral good and evil to each other.

Natural justice is the conformity of human laws and actions to natural order; and this collection of physical and moral laws existed before any positive institutions among men. And while their observance produces the highest degree of prosperity and well-being among men, the non-observance or transgression of them is the cause of the extensive physical evils which afflict mankind.

If such a natural order exists, our intelligence is capable of understanding it; for if not, it would be useless, and the sagacity of the Creator would be at fault. As, therefore, these laws are instituted by the Supreme Being, all men and all States ought to be governed by them. They are immutable and irrefragable, and the best possible laws; they are necessarily the basis of the most perfect government, and the fundamental rule of all positive laws, which are only for the purpose of upholding that natural order, which is evidently the most advantageous for the human race.

The evident object of the Creator being the preservation, the increase, the well-being, and the improvement of the race, man necessarily received from his origin, not only intelligence, but instincts conformable to that end. Every one feels himself endowed with the triple instincts of well-being, sociability, and justice. He understands that the isolation of the brute is not suitable to his double nature, and that his physical and moral wants urge him to live in the society of his equals in a state of peace, goodwill, and concord.

He also recognizes that other men, having the same wants as himself, cannot have less rights than himself, and, therefore, he is bound to respect their rights, so that other men may observe a similar obligation towards him.

These three ideas—the necessity of work, the necessity of society, and the necessity of justice—imply three others—liberty, property, and authority—which are the three essential terms of all social order.

How could man understand the necessity of labour, or obey the irresistible instinct of self-preservation, without perceiving, at the same time, that the instruments of labour, the physical and intellectual qualities with which he is endowed by Nature, belong exclusively to himself, that he is master, and the absolute proprietor of his own person, that he is born, and should remain, free?

But the idea of liberty cannot spring up in the mind without associating with it that of **Property**, in the absence of which the first would only represent an illusory right without an object. The freedom the individual has of acquiring useful things by labour includes necessarily the right of preserving them, of enjoying them, and of disposing of them without reserve, and also of bequeathing them to his family, who prolong his existence indefinitely. Thus liberty conceived in this manner involves, and is dependent on, the idea of property, which may be conceived in two aspects, as it regards movable goods, and as it regards the earth, which is the source from which labour ought to draw them.

At first property was principally movable, but when the cultivation of the earth was necessary for the preservation, increase, and improvement of the race, individual appropriation of the soil became necessary, because no other system is so proper to draw forth from the earth all the mass of utilities it can produce; and, secondly, because collective property would have produced many inconveniences as to the sharing of the fruits, which would not arise from the division of the land, by which the rights of each are fixed in a clear and definite manner. Property in land is, therefore, the necessary and legitimate consequence of the principle of personal and movable property. Every man has, therefore, centred in him by the laws of Providence certain Rights and Duties—the right of enjoying himself to the utmost of his capacity, and the duty of respecting similar rights in others. This perfect protection of reciprocal rights and duties conduces to production in the highest degree, as well as to the greatest amount of physical enjoyments.

Thus the Economists established freedom and property as the

fundamental right of mankind—Freedom of Person, Freedom of Opinion, and the Freedom of Commerce or Exchanges; and the violation of these they maintained to be contrary to the laws of Providence, and therefore the cause of all evil to men.

Doctrine of the Economists regarding Commerce or Exchanges.

Having now explained how the Economists cleared the way for the consideration of the positive Science, by sweeping away all obstructions to the freedom of Commerce or Exchanges, we must now see how they endeavoured to construct the positive Science of Commerce or Exchanges.

While they expressly declared that Exchanges, or Commerce, was one department of Economical Philosophy—and it is to this department of it that the name of Economics is now restricted --they unfortunately devised another and an alternative name for it which, being misinterpreted by a very distinguished French Economist, has been the cause of all the mischief and confusion in the Science, and of the lamentable state into which it has fallen at present.

They termed the department of Economical Philosophy relating to Commerce, or Exchanges, the “**Production, Distribution, and Consumption of Wealth.**”

It might not be very apparent to the general reader how the two expressions “Commerce” or “Exchanges” is identical with that of the “Production, Distribution, and Consumption of Wealth;” and we must now explain the meaning of this latter expression given to it by its authors.

They defined the word “Wealth” to be the *material* products of the earth which are brought into Commerce and **Exchanged**, and those only. The products of the earth which were consumed by their owners, and without being exchanged, they termed *Biens*, but not *Richesse*.

Thus Quesnay says, “We must distinguish between goods (*Biens*) which have *value in use* and not *value in exchange*, and **Wealth** (*Richesse*) which has both value in use and value in exchange. For instance, the savages in Louisiana enjoy many *Biens*, such as wood, game, the fruits of the earth, &c., which are not *Richesse*, because they have no value in exchange. But since some kinds of commerce have been established between them and the French, the English, the Spaniards, &c., part of these *Biens* have acquired a *value in exchange*, and are become *Richesse*.”

So Baudeau says, "Useful and agreeable objects proper for our enjoyment are called *Biens*, because they conduce to the preservation, the propagation, and the well-being of men on the earth.

"But sometimes these *Biens* are not *Richesse*, because they cannot be exchanged for other goods, or be used to procure other enjoyments. The products of Nature or the works of Art, the most necessary or the most agreeable, cease to be *Richesse* when you lose the power of exchanging them and of procuring other enjoyments by means of this Exchange. One hundred thousand feet of the most beautiful oak in the world would not be *Richesse* to you in the interior of North America, where you could not divest yourself of its possession by means of an Exchange.

"The title *Richesse*, therefore, supposes two things: First, useful qualities, which render them *Biens*; secondly, the possibility of exchanging them, which enables these *Biens* to procure you others, which constitutes them *Richesse*."

So also Le Trosne says, "Man is surrounded by wants which are renewed every day. . . . Whatever they are, it is only from the earth that he can draw the means of supplying them. This physical truth, that the earth is the source of all *Biens*, is so self-evident that no one can doubt it. . . . But it is not sufficient to estimate products by their useful qualities: we must consider the property they have of being exchanged against each other. . . . Products acquire, therefore, in a state of society, a new Quality, which springs from the communication of men with each other. This Quality is **Value**, which makes the products become *Richesse*; and so there is nothing superfluous, because the excess becomes the means to obtain what one wants.

"Value consists in the Relation of Exchange which exists between such and such products. . . . In a word, the Quality of *Richesse* supposes not only a useful property, but also the possibility of Exchange; because Value is nothing but the Relation of Exchange. The earth in truth only gives products which have the physical qualities to satisfy our wants: it is **Exchange** which gives them **Value**—a quality relative and accidental. But as it is the products themselves which are the sole matter of exchange, it follows that we can say, with truth, that the earth produces not only all *Biens*, but all *Richesse*."

Thus, the definition of Wealth by the Economists was perfectly clear and intelligible: it was the *material* products of the earth which are brought into Commerce and *Exchanged*, and these only. The Economists steadfastly adhered to this doctrine (**Wealth**).

In the first place, they declared that Economics has nothing to do with *Value in use* or Utility, but only with *Value in exchange*; and, secondly, they restricted the term Wealth to the material products of the earth only. They steadfastly refused to admit that Labour and Credit, *i.e.* Rights of Action, Credits or Debts, and other Rights, are Wealth, because they alleged that to admit that Labour and Credit are Wealth would be to maintain that Wealth can be created out of nothing. They constantly maintained that man can create nothing, and that *ex nihilo nihil fit*.

Meaning of "Production, Distribution, and Consumption of Wealth."

By **Production** the Economists meant obtaining the rude produce from the earth, and *bringing it into Commerce* (**Production**).

But this rude produce is scarcely ever fit for human use. It has to be fashioned and manufactured in a multitude of ways, and to be transported from place to place, and perhaps sold and resold more than once, before it is ultimately purchased for use and enjoyment.

All these intermediate operations of manufacture, transport, and sale between the original Producer and the ultimate purchaser, the Economists termed *traffic*, or **Distribution** (**Distribution**), and all the persons engaged in them they termed **Distributors**.

Consummation, or **Consumption** in the language of the Economists, and all French writers before them, and also Adam Smith, meant simply **Purchase** or **Demand**; it involved no idea of destruction.

Great confusion has been caused by the two French words, *Consummation* and *Consumption*, being represented by only one English word, Consumption. Now *Consummation* comes from *consommer*, which comes from the Latin *consummare*, to complete; and *Consumption* comes from *consumer*, the Latin *consumere*, to destroy. *Consummation* is the Latin *consummatio*, consummation, or completion (**Consumption**).

The final purchaser who bought the product for his own use and enjoyment, and so took it out of commerce, the Economists termed the *Acheteur-consommateur*, because he consummated or *completed* the transaction.

The *Consommateur*, or Consumer, was the person for whose benefit all the preceding operations took place. Production was only for the sake of Consumption, or Demand; and Consumption, or Demand, was the measure of reproduction, because products

which remain without Consumption, or Demand, degenerate into superfluities without value.

The complete passage of a product from the original Producer to the ultimate Consumer, or Purchaser, through all its intermediate stages, the Economists termed **Commerce**, or **Exchange**; and as any man, who wished to consume, or purchase, any product, must have some product of his own to give in exchange for it, he was also a producer in his turn. Hence, in an exchange, things are produced and consumed (*consommé*), or purchased, on each side. An Exchange has only two essential terms, a Producer, or Seller, and a Consumer, or Buyer. These are the only two persons necessary to commerce, and they often exchange directly between themselves without any intermediate agents.

Hence the "Production, Distribution, and Consumption of Wealth," as defined by the Economists, meant simply the Commerce, or the Exchanges, of the *material* products of the earth, and of these only.

But Distribution was often used as synonymous with Consumption. Hence "Production, Distribution, and Consumption," "Production and Distribution," and "Production and Consumption," all meant exactly the same thing—the **Commerce** or **Exchange** of the material products of the earth, and of these only.

It must be carefully observed that these expressions are one and indivisible; they must not be separated into their component terms. They all simply meant Supply and Demand.

The Economists, by restricting the term Wealth to the *material* products of the earth, made materiality and labour the accessories or *accidents* of Wealth, but they did not make them the *essence* or *principle* of Wealth. The Essence or Principle of Wealth they held to consist in **Exchangeability**, because they expressly excluded from the term Wealth all the material products of the earth which were not brought into commerce and exchanged.

Now considering that the Economists admitted and declared that there is a definite and positive Science of Exchanges, or Commerce, how is it possible to restrict it to the Commerce, or Exchanges, of the *material* products of the earth only? It must evidently and necessarily comprehend *all* Exchanges and *all* Commerce, in its widest extent, and in all its forms and varieties.

There is a gigantic commerce in Labour; there is a colossal commerce in Rights and Rights of Action, Credits, or Debts, Public Securities, and other forms of Incorporeal Property; in fact, this is the most extensive department of Commerce, or Exchanges. How

is it possible to exclude the commerce in Labour and the commerce in Rights and Rights of Action from the general Science of Exchanges, or Commerce?

But even supposing that the Science of Economics were restricted to the commerce in material things only, it cannot be confined to the products of the earth only. The land itself is an article of commerce. Persons buy and sell land. How is it possible to speak of the "Production, Distribution, and Consumption" of land?

Moreover, the expression "Production, Distribution, and Consumption of Wealth" comprehends a whole series of Exchanges. When the farmer produces corn, and offers it for sale to the miller, that is an Exchange; when the miller grinds the corn into flour, and sells it to the baker, that is an Exchange; when the baker bakes the flour into bread, and sells it to the customer, that is an Exchange. When ships and carriers transport the products from one place to another, that is an Exchange, for they receive payment in exchange for their services. When merchants and manufacturers sell goods to wholesale dealers, that is an Exchange; when wholesale dealers sell goods to retail dealers, that is an Exchange; when retail dealers sell goods to their customers, that is an Exchange.

Thus the whole series of transactions which the Economists included under Distribution are simply a series of Exchanges.

The basis of the Science of Economics is the meaning of the word **Wealth**. The Economists admitted that Exchangeability is the essence and principle of Wealth; but they clogged it with the limitation that it only applies to *material* products which are exchanged, and denied it to Labour and Credit (including all species of Rights), which equally possess the quality of Exchangeability. But this is contrary to the fundamental principles of Natural Philosophy. Bacon long ago pointed out that when the Quality, or Concept, which is the basis of the Science, is once determined, all Quantities whatever which possess that Quality, however diverse in form they may otherwise be, must be included among the constituents, or elements, of that Science, even though they possess no other Quality in common, except that one which is the basis of the Science. This is what Plato calls the *one in the many, i.e.*, the same Quality appearing in many diverse forms. It would be just as rational to restrict the term Force to the force of men and animals, and to exclude gravitation from the term force, as to restrict the term Wealth to the exchangeable *material* products of the earth, and to exclude Labour and Rights, which equally possess the quality of Exchangeability, from the term Wealth.

Contemporary, mercantile, and general writers were dead against the Economists on the question of excluding Credit from the term Wealth. They all included Credit under the term Wealth (**Credit, Wealth**).

Thus the restriction of the term Wealth to the material products of the earth is quite untenable, and we have now to see what other writers have said on the subject.

And it must be understood that the determination of the true meaning of the word Wealth is not merely a matter of vain logomachy and curious speculation. On the contrary, not only is this word the basis of a great Science, but there is none probably which has so seriously influenced the history of the world and the welfare of nations, according to the meaning given to it at various periods.

For many centuries the legislation of every nation in the world was moulded by the meaning given to the word Wealth. The eminent French economist, J. B. Say, says that during the two centuries preceding his time fifty years were spent in wars directly originating out of the meaning given to this word.

Another Economist, Storch, speaking of the mercantile system which prevailed so long, says: "It is no exaggeration to say that there are few political errors which have produced more mischief than the mercantile system. . . . It has made each nation regard the welfare of its neighbours as incompatible with its own; hence their reciprocal desire of injuring and impoverishing one another, and hence that spirit of commercial rivalry which has been the immediate or remote cause of the greater number of modern wars. . . . In short, where it has been the least injurious, it has retarded the progress of national prosperity; everywhere else it has deluged the earth with blood, and has depopulated and ruined some of those countries whose power and opulence it was supposed it would carry to the highest pitch."

So Whately says: "It were well if the ambiguities of this word had done no more than puzzle philosophers. . . . It has for centuries done more, and, perhaps, for centuries to come will do more, to retard the progress of Europe than all other causes put together."

Now certainly we may be very sure that no wars in future times will ever again be caused by the meaning of the word Wealth. But, for all that, is all danger over? Far from it. On the contrary, if possible, we are menaced with a more terrible danger still. Because that dread spectre of Socialism, which now threatens war and revolution to every country on the Continent, and from which this country is not entirely free, is entirely based, as the Socialists them-

elves say, on the doctrines of Wealth, put forward by Adam Smith and Ricardo.

These considerations, which are nothing but the literal truth, shew the gravity and the importance of the inquiry, and we hope that we shall succeed in removing this stumbling-block to the progress and apprehension of Economic Science.

Definition of Wealth by Ancient Writers.

Ancient writers for 850 years held that **Exchangeability**, pure and simple, is the sole essence and principle of Wealth—that everything whatever which can be bought and sold, or exchanged, is Wealth, whatever its nature or its form may be.

Thus Aristotle says (*Nicomac. Ethics*, book v.):

“*χρήματα δὲ λέγομεν Πάντα ὅσων ἡ ἀξία νομίσματι μετρεῖται.*”

“*By the term Wealth we mean all things whose value can be measured in money.*”

So the great Roman jurist Ulpian says:

“*Ea enim Res est quæ emi et venire potest.*”

“*For that is Wealth which can be bought and sold.*”

In accordance with this J. S. Mill says (*Prin. of Pol. Econ. Preliminary Remarks*): “Everything, therefore, forms a part of Wealth which has a **Power of Purchasing.**”

Now in these sentences we have a fundamental Concept of the widest generality, which is fitted to be the basis of a great science. Out of this single sentence of Aristotle's the whole Science of Economics is to be evolved, just as the great oak-tree is developed out of the tiny acorn.

This is the definition which we adopt as the basis of the Science.

A Quantity means anything whatever which can be measured; hence, an **Economic Quantity** means Anything whatever which can be bought and sold, or exchanged; which possesses the Quality of **Exchangeability**; or whose value can be measured in money; no matter what its form or its nature may be.

The sole criterion, then, of anything being Wealth is—Can it be bought and sold? Can it be exchanged separately and independently of anything else? Can it be valued in money?

This criterion may seem very simple; but, in fact, to apply it properly, to discern what is, and what is not, separate and independent Exchangeable Property, requires a thorough knowledge of some of the most abstruse branches of Law and Commerce.

Three Species of Wealth or Economic Quantities.

Adopting, then, this definition of Wealth, or of an Economic Quantity, as **Anything** whatever which can be bought and sold, exchanged, or whose *Value can be measured in money*, which, from generality, is fitted to form the basis of a great Science, we have next to discover how many Species, or Orders of Quantities, there are which satisfy this definition, as possessing the Quality Exchangeability, or which can be bought and sold, or exchanged, whose Value can be measured in money.

I. **Material, or Corporeal Wealth.**—There are material things of all sorts, such as lands, houses, money, corn, cattle, timber, herds of all sorts, jewellery, minerals, and innumerable other material things which can be bought and sold, or exchanged, and whose Value can be measured in money; therefore they are Wealth by the definition.

II. **Immaterial Wealth.**—There exists a remarkable work of antiquity, which is the earliest treatise on an Economical question that we are aware of. It is a dialogue named the *Eryxias*, or, **Wealth**. It is attributed to Æschines Socraticus, one of the most distinguished disciples of Socrates, but critics deny this. Very high authorities consider that it was written in the early Peripatetic period.

In this dialogue Socrates is made to discuss the nature of Wealth. He asks, Why are some things Wealth at some places, and not at others? And at some times, and not at others? Why are different kinds of money Wealth at some places, and not at others? Socrates shows that whether things are Wealth or not depends on the Demand (*χρεία*) for them. He shows that money is only valuable, and is Wealth, in those places where it can purchase other things; and that where it cannot purchase, or be exchanged for, other things, it is not Wealth. He shows that if any other things can purchase other things, they are Wealth, for just the same reason that money is.

He instanced persons who gained their living by giving instruction in the various sciences. They were able to purchase the necessaries of life in exchange for their lessons in science, just in the same manner as they could with money. Therefore, said Socrates, the Sciences are Wealth—*αἱ ἐπίστημαι χρήματα οὔσαι*; and that those who possess them are richer—*πλουσιώτεροί εἰσι*.

When Socrates in this dialogue is made to say that the Sciences are Wealth, that, of course, is a general term for **Labour**; for Labour in Economics is any exertion of human thought or abilities which is wanted, demanded, and paid for. Socrates in this dialogue shows

that the Mind has wants and demands, as well as the body; and that things which are wanted and demanded for the Mind, and are paid for, are equally Wealth as the things which satisfy the wants and demands of the body, and are paid for.

Labour cannot be seen, nor touched, nor transferred by manual delivery; but it can be bought and sold, its Value can be measured in money, and therefore it is Wealth.

Hence, each of the great Sciences and Professions is a great Estate, which produces Utilities which are wanted, demanded, and paid for, as much as any material products; and are consequently Wealth, just as much as any material chattels are, because their Value is measured in money.

Thus, as will be seen hereafter, the author of this dialogue anticipated Adam Smith by 1200 years.

Thus, Personal Qualities in the form of Labour were demonstrated to be Wealth.

Demosthenes shows that Personal Credit is Wealth.

But Personal Qualities may be used as Purchasing Power, or Wealth, in another form besides that of Labour.

If a merchant enjoys good "Credit," as it is termed, he may go into the market and buy goods, not with Money, but by giving his Promise to pay money at a future time; that is, he creates a **Right of Action** against himself. It is a Sale or an Exchange. The goods become his actual property, exactly as if he had paid for them with money. This Right of Action is the price he pays for the goods. It is termed a **Credit**—in French, a *Créance*—because it is not the Right to any specific sum of money; but only a Right of Action to demand a sum of money from the merchant at some future time, and any one who buys it, or takes it in exchange for goods, does so only in the belief or confidence that the merchant can pay his Debt at the stipulated time.

Hence, a merchant's **Credit** is Purchasing Power, exactly as Money is. A merchant's Purchasing Power is his **Money** and his **Credit**. They are both equally Wealth, by Mill's own definition. When a merchant purchases goods with his Credit, instead of with money, his Credit is *valued in money*, because the seller of the goods accepts his Credit as equal in value to money; his Credit is valued in money, exactly as his Labour may be. Hence, by Aristotle and Mill's definition of Wealth, which is now universally accepted, the merchant's **Personal Credit** is Wealth.

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Thus Demosthenes says (*Against Leptines*, 484, 20):

“δυοῖν ἀγαθοῖν ὄντοι Πλούτου τε καὶ πρὸς ἅπαντας Πιστεύεσθαι, μείζον ἐστὶ τὸ τῆς Πίστεως ὑπάρχον ἡμῖν.”

“There being two kinds of Wealth—Money and General Credit—the greater is Credit, and we have it.”

So also, again (*For Phormion*, 958):

“εἰ δὲ τοῦτο ἀγνοεῖς ὅτι Πίστις Ἀφορμὴ τῶν πασῶν ἐστὶ μέγιστη πρὸς χρηματισμὸν πᾶν ἂν ἀγνοήσεις.”

“If you were ignorant of this, that Credit is the greatest Capital of all towards the acquisition of Wealth, you would be utterly ignorant.”

Thus Demosthenes shows that Personal Credit is ἀγαθά—Wealth, Property, Goods, Chattels—and ἀφορμή, Capital.

Thus, though Personal Credit, like Labour, can neither be seen, nor handled, nor transferred by manual delivery, yet it can be bought and sold, or exchanged. Its *Value can be measured in Money*; it is **Purchasing Power**, and, therefore, it is **Wealth**.

Hence, the Personal Credit of all bankers, merchants, and traders is an integral and colossal portion of the national Wealth, just as the industrial faculties of all working men of all kinds are.

So also the Credit of the State, by which it can purchase Money and other things from persons by giving in exchange for them the Right to demand a series of future payments from it, is National Wealth.

The Roman and Greek Jurists shew that Abstract Rights and Rights of Action are Wealth.

III. Incorporeal Property as Wealth.—We have seen that when a merchant purchases goods with his Credit he gives in exchange for them, as their price, a Promise to pay at a future time; that is, he creates a Right of Action against himself, which is also called a **Credit** or a **Debt (Credit, Debt)**. Now, the seller of the goods, who has acquired this Right of Action, Credit, or Debt, can go into the market, and purchase other goods with it, as well as with money; and this Right of Action, Credit, or Debt, may circulate in commerce, and effect any number of exchanges, just like money, until it is paid off and extinguished, and then it ceases to exist.

So, if a person pays money into his account with his banker, the banker purchases the money by giving his customer a Credit in his books, termed, in the technical language of modern banking,

Deposit. That is, the banker creates a Right of Action, Credit, or Debt against himself, which is the price of the money, and which entitles the customer to demand back an equal sum of money at any time he pleases. That is, the banker is bound to buy up this Right of action against himself at any time the customer pleases; or he can transfer this Right of Action to any one else by means of a Bank Note or Cheque, and then the transferee acquires the same rights against the banker as his customer had, and so this Bank Note or Cheque may circulate and effect exchanges, and discharge debts just like an equal quantity of money, until it is paid off and extinguished.

Thus, Rights of Action, Credits, or Debts, are vendible commodities, just like any material chattels, and their value depends upon exactly the same principle as the value of anything else, *i.e.* whether they can be bought up and paid when due.

So the great Roman Jurist, Ulpian, says (*Digest*, 18, 4, 17):

“Nomina eorum qui sub condicione vel in diem debent, et emere et vendere solemus. Ea enim Res est quæ emi et venire potest.”

“We are accustomed to buy and sell Debts payable on a certain day or on a certain day. For that is Property which can be bought and sold.”

But besides Abstract Rights in the form of Credits, or Debts, there are gigantic masses of Abstract Rights of other kinds, such as Shares in Commercial Companies, Copyrights, Patents, the Goodwill of a business, Practices, and a multitude of others, which can all be bought and sold, or exchanged, or whose Value can be measured in money; and, therefore, are Wealth by the now universally-received definition.

Accordingly, in the Pandects of Justinian, the great Code or Digest of Roman Law, it is laid down as a fundamental definition, or principle, that Rights and Rights of Action are included under the terms *Pecunia, Bona, Res, Merx*, &c. (**Rights**).

In the *Basilica*, which is the great revised Code of the Eastern Empire published in the ninth and tenth centuries, it is also laid down that Rights and Rights of Action are included under *χρήματα, πράγματα, οἶκος, ἀγαθά, οὐσία, οὐσία ἀφάνης*, &c.

Now, Rights and Rights of Action in the abstract form are not visible to the eye, nor can they be touched, nor transferred by manual delivery; but, like Labour and Credit, they can be bought and sold or exchanged, their Value can be measured in money; therefore, they are Wealth by the now universally received

definition. Rights and Rights of Action in the abstract form are termed Incorporeal Property, or Incorporeal Wealth.

It is thus seen that the ancients possessed the true scientific spirit. They saw that Exchangeability is the true essence and principle of Wealth, and they searched out all the quantities which possess this quality. The author of the *Eryxias* showed that Labour is Wealth, because it can be bought and sold. Demosthenes showed that Personal Credit is Wealth, because it is Purchasing Power ; and the Roman jurists showed that Rights and Rights of Action are Wealth, because they can be bought and sold. Thus, after a period of 800 years, the ancients conquered the whole field of Economics, because there is nothing which can be bought and sold or exchanged, or whose Value can be measured in money, which is not of one of these three forms : Either it is (1) a Material Commodity, or it is (2) a Personal Quality in the form of Labour or Credit, or it is (3) an Abstract Right or Right of Action. Hence, they showed that there are three orders of Exchangeable, or Economic, Quantities, and there are no more. Hence, the Science was now complete, for these are all its constituent elements, and the whole of pure Economics consists of the Exchanges of these three orders of Economic Quantities. And as these three orders of Economic Quantities can be exchanged two and two, in six different ways, it follows that all Commerce, in its widest extent and in all its different forms and varieties, consists in these six species of exchanges. This Science may be designated as Pure, or Analytical, Economics.

The relation which any one of these quantities bears to any of the others is termed its **Value** with respect to them.

As the object of the Science is to ascertain the Laws which govern the relations of these Quantities to each other, and their changes of relation, it is evidently a mathematical science, for it is a Science of Variable Quantities ; and its Laws must be brought into harmony with the Laws of all other Sciences of Variable Quantities ; that is, there can only be one great General Law which governs their relations.

And if any of the great Roman Lawyers, with the materials he had before him, had ever conceived the idea of constructing a complete scientific exposition of the principles and mechanism of the mighty system of Commerce, and the Laws which govern it, Economics might have been the eldest born of all the Sciences. It would have been 1500 years in advance of its present state, and it would have saved centuries of misery, bad legislation, and bloodshed to the world.

But it was not to be. There was at that time no Physical Science in existence to serve as the guide for the construction of a Science of Variable Quantities, such as Economics. The Science of Economics will remain a monument to the eternal glory of Bacon, who strenuously insisted that it was indispensable to create the Physical Sciences, before it was possible to construct the Sciences of Society.

Although no ancient writer ever conceived the idea of creating a great general Science of Economics, or of Commerce, there was one department of it which they carried to great perfection, namely, the Commerce in Rights of Action, Credits, or Debts. The Roman Jurists elaborated the great Juridical Theory of Credit.

The following is a brief sketch of the History of the Theory of Credit.

Demosthenes was the first to perceive and declare that Credit is Wealth and Capital.

But Concrete Practice always precedes Abstract Theory.

The Romans invented the business which in modern language is termed Banking; the Roman bankers invented Cheques, and Bills of Exchange; and the Roman jurists elaborated the great Juridical Theory of Credit.

In the times of the Republic, all the possessions belonged to the family as a whole, but the *Dominus*, or the Head of the house, alone exercised all rights over them. He was accordingly required to keep a great family ledger, in which all the incidents of his life were recorded. He was obliged to enter in it all the possessions of the family, all his trade profits and losses, all his revenues and profits, his outgoings and expenses of every description, all sums borrowed and lent, so that the family might see how he had dealt with the family property. The Romans thus became accustomed to the Transfer of Debts. These family ledgers were legal evidence of debts among Roman citizens, receivable in Courts of Justice. The *Dominus* was obliged to swear to the truth of his books every five years before the Censor, and then they were preserved as heirlooms in the family; and it was from these family ledgers that the whole of the modern system of book-keeping and Credit has been developed.

Some of the elementary principles of Credit were set forth in Gaius, which was the elementary text-book for students from the age of the Antonines till Justinian.

But after Gaius, the jurists Paulus, Ulpian, Modestinus, Javolenus, and Papinian—the greatest jurists the world ever saw—worked out

the complete juridical Theory of Credit, except only on one point. And from the emphatic way in which certain elementary principles are laid down, it is quite evident that there were silly persons who chattered about Credit at Rome, just as there are at the present day. The principles elaborated by these jurists were incorporated in the *Pandects* of Justinian, and in the *Basilica*, and have been the mercantile law of Europe. They are contained in every Continental text of Jurisprudence. But upon this subject English legal textbooks are lamentably defective; and no scholastic Economist ever had any more notion of them than a child of six years old has of the triple expansion engines of the *Campania*. These principles have, by a statute which came into operation in 1875, been enacted as Law in England.

The doctrines of the Roman Jurists were, however, inadequate for the complete Theory of Credit, as they chiefly regarded the subject from the Creditor's side, and only very slightly from the Debtor's side.

But in every Obligation there are two sides—the Creditor's, or the Active or Positive side, and the Debtor's, or the Passive or Negative side. Now it is evident that the complete Theory of Credit must be developed simultaneously, both from the Creditor's and the Debtor's side. But the latter requires principles of mathematics which have only been fully understood by mathematicians themselves, and introduced into popular treatises, within the last sixty years.

I have now laid bare the foundations of Economic Science. Like Botta and Layard at Nineveh; Schliemann at Troy, Argos, and Mycenæ; Petrie, and many other explorers in Egypt—I have swept away the rubbish and folly which has accumulated over the doctrines of the ancients for centuries, and laid bare the solid and impregnable foundations upon which the majestic structure of Economic Science is to be erected.

Continuation of the Doctrine of the Economists.

The Economists on Money.

One of the most important services the Economists rendered to Economics was to re-establish the true doctrine of the nature and use of **Money**.

The Mercantile System held that Money is the only species of Wealth; the evident absurdity of this doctrine was so great that it naturally led to reaction, and, as usual in such cases, opinion went

to the other extreme. It was held that Money is not Wealth at all, but only the **Sign**, or **Representative**, of Wealth.

This naturally led to the doctrine that as Money is only the *means* of obtaining other things, it is wholly indifferent what it is made of, and that it is only the command of the Sovereign which gives it Value. It was maintained that the Prince might diminish the quantity of metal in the coin, or even debase it, as much as he pleased, and still affix any value he pleased to it.

The Economists shewed that Money is neither all Wealth, nor is it not Wealth; but it is simply a species of merchandise, which is used for a particular purpose, to facilitate commerce. It is found more convenient in commerce, instead of exchanging products directly for one another, to exchange them for some intermediate merchandise, which is itself universally exchangeable. Such an operation is termed a **Sale**. Any merchandise whatever might have been chosen for this purpose, but there are many reasons why Gold and Silver are superior to all other species. The merchandise which is used for this purpose is termed **Money**. But this kind of exchange differs in no way from any other, and the Money given in exchange is the **Equivalent** of the merchandise. Thus, though every one agrees to take Money in exchange for products, it is not the **Sign**, or **Representative**, of the products, but their **Equivalent**. Money is, therefore, nothing but one species of merchandise, and any other merchandise might have been made money. Hence, though money has uses of its own, yet its Value, or exchangeable power, depends upon exactly the same laws as the value of any other merchandise. Money, therefore, is Wealth in itself, but only a very small part of the general Wealth.

The Economists only admitted an Exchange to be a transaction in which each party obtained a satisfaction, or something which he desired for use: that is, when the desire of each party was consummated, or completed.

Such an Exchange is termed Barter. But in the intercourse of society such Exchanges are comparatively rare. Persons want usually to obtain things from others, while those others want nothing from them. To obviate the inconveniences which would take place if no one could get what he wanted unless he had something at the same time to offer the other party which he wanted, people hit upon the plan of adopting some particular kind of merchandise which should be universally exchangeable. The buyer, therefore, gave the seller of the product an equivalent quantity of this universally

exchangeable merchandise, so that he could get any satisfaction he pleased from someone else. The person, however, who has received the Money has not got a **Satisfaction**; his desire is not **Consummated**, or **Completed**. In order to obtain a satisfaction, he must exchange away the money for something else he does desire. Hence the Economists called a Sale a **Demi-Exchange**.

Le Trosne says: "There is this difference between an Exchange and a Sale, that in the Exchange everything is completed (*consommé*) for each of the parties; they have the thing which they desired to obtain, and have only to enjoy it. In the Sale, on the contrary, it is only the buyer who has gained his object, because it is only he who is in a condition to enjoy. But everything is not ended for the seller."

And again: "Exchange arrives directly at its object, which is completion (*consommation*): there are only two terms, and it is ended in a single contract. But a contract in which money intervenes is not completed (*consommé*), because the seller must become a buyer either by himself, or by the interposition of him to whom he shall transfer his money. There are, therefore, to arrive at the completion (*consommation*), which is the final object, at least four terms and three parties, one of whom intervenes twice."

In fact, although Money is an Equivalent merchandise to the product it is exchanged for, its real use and purpose is to be a **Right** or **Title** to obtain anything else which its possessor desires. Hence its true nature is that of a **Bill of Exchange** on the general community.

Thus Baudeau says: "This coined Money in circulation is nothing, as I have said elsewhere, but **Effective Titles** on the general mass of useful and agreeable enjoyments which cause the well-being and propagation of the human race.

"It is a kind of **Bill of Exchange**, or **Order**, payable at the will of the bearer.

"Instead of taking his share in kind of all matters of subsistence, and all raw produce annually growing, the Sovereign demands it in Money, the **Effective Title**, the **Order**, the **Bill of Exchange**."

Hence the Economists saw clearly that Money is only the highest form of **Credit**, a truth which we have shown a long line of Jurists and Economists have seen (**Money**).

Money, then, being only an Order, or Bill of Exchange, on all the products of the country, and its only use being to facilitate the exchanges of products, a substitute may be found for it. The

Economists showed that instead of the quantity of Money in a country being the measure of its wealth, it is generally the contrary. In rich countries the valuable paper of rich merchants supplies the place of money, and is itself an object of commerce just like money. It is only in poor and barbarous countries, where no one has confidence in his neighbour, that a large stock of money is required. The use of more money than is absolutely required is a great loss to a country, because it can only be purchased with an equivalent amount of products, and their value is thus withdrawn from being employed in productive operations. Any country which has plenty of products can at any time purchase any amount of money it may require. The Economists, therefore, strongly urged the entire abolition of all restrictions on the free export of money, and also the entire abolition of usury laws.

The Economists termed a Sale a Demi-Exchange. The Exchange was completed when the seller of the product, who had obtained money for it himself, procured some object for it which he desired. Thus, a wine-merchant may have sold wine to his clients, and got paid for it in money. But he can make no direct use of the money: he can neither eat it, nor drink it, nor clothe himself with it. It is only when he has got the food, clothes, books, etc., which he wants, that the Exchange is completed.

For this reason **Money** is called the **Medium of Exchange**.

But the Economists also called a Sale **Circulation**, and the number of sales was the amount of the Circulation.

Hence, Money was also called the **Medium of Circulation**, or the **Circulating Medium**.

The Economists on the Balance of Trade.

During the prevalence of the Mercantile System, Money was held to be the only wealth, from which doctrine the consequence naturally followed that in every exchange one side must gain and the other side must lose. This doctrine was the cause of many commercial wars.

The Economists held that in an Exchange neither side gains or loses. This was an advance on the preceding doctrine of the Balance of Trade, and they proclaimed the falsity of that doctrine as then held. They held that there is always an Exchange of equal value for equal value. From this doctrine, which they maintained with unflinching pertinacity, they drew the most extraordinary consequences, as we shall have to show immediately.

The Economists on Productive Labour, and on Sterile or Unproductive Labour.

We have now to notice a remarkable and distinctive doctrine of the Economists.

They defined **Productive Labour** to be Labour which left a Profit after defraying its Cost.

They maintained that agriculture and Labour, that is, Labour employed in obtaining all sorts of raw produce from the earth, is the only species of Productive Labour ; or the only one which leaves a surplus Profit after defraying its Cost.

The surplus of the raw produce of the earth, after it has defrayed all the Cost of its Production, the Economists termed the **Prodit Net** ; and they alleged that it is the sole augmentation of National Wealth, and that all Taxation should come out of it.

They maintained that all other Labour expended on the raw produce of the earth, either in fashioning it, or in manufacturing it, or in transporting it from place to place, or in selling and re-selling it, is **Sterile and Unproductive**, and adds nothing to the Wealth of the Nation. And they maintained that neither the Labour of artisans, nor the operations of Commerce in any way enrich the country.

They alleged that the Labour of artisans is Sterile, or Unproductive, because, though their Labour adds to the value of the product, yet during the process of the manufacture the labourer consumes his subsistence, and the value added to the product only represents the value of the subsistence destroyed during the Labour. Hence in this case, though there is an augmentation of Value, there is no augmentation of Wealth.

Again, they maintained that Commerce cannot enrich a country, because it is always an exchange of equal value for equal value. Over and over again the Economists alleged that Commerce being only an exchange of equal values, neither side can gain or lose. They held that the only use of Commerce is to vary and multiply the means of enjoyment, but that it does not *add* to national Wealth, or, if it does, it is only by giving a value to the products of the earth which might otherwise fail in finding a market. They contended also that as all exchanges are mere equal value for equal value, the same principles apply to sales, and that the gains which traders make are no increase of Wealth to the nation.

The Economists maintained these doctrines through long and

repeated arguments, and they came to be known as their distinctive doctrines. How men of the ability of the Economists could maintain that neither the Labour of artisans nor Commerce can enrich a nation, with the examples of Tyre, Carthage, Venice, Florence, Holland, England, and innumerable other places before them, is incomprehensible. With such patent, glaring *facts* before them, it is surprising that they were not led to suspect the truth of their reasoning. It is one of the aberrations of the human intellect which we can only wonder at and not explain.

With such views they held that the internal Commerce of a country conduces nothing to its Wealth, and foreign Commerce very little. They called foreign Commerce only a *pis-aller*. One truth, however, they perceived. They saw that Money is the most unprofitable merchandise of any to import, and that merchants never import Money when they can import products. Therefore they called the import of Money in foreign Commerce only the *pis-aller* of a *pis-aller*.

Dogma of the Economists that Labour and Credit are not to be admitted to be Wealth.

The Economists restricted the term Wealth to the *material* products of the earth which are brought into commerce and exchanged. That is, they admitted that **Exchangeability** is the real essence and principle of Wealth, but that only *material* Exchangeable Quantities are to be included under that title. From this it is evident that they were not students of Bacon, or they would have seen that the immortal creator of Inductive Philosophy expressly lays down that when once the Quality, or Concept, has been determined as the basis of a great Science, *all* quantities whatever which possess that quality, or attribute, must be included in the science, however diverse in form or matter. They alleged that to admit Labour and Credit, both as Personal Credit and Rights of Action, to be Wealth, would be to admit that Wealth can be created out of Nothing. They repeated a multitude of times that *Man can create Nothing*, and that *Nothing can come out of Nothing*. We have already seen that the ancients demonstrated that Labour and Credit of both forms are Wealth, in sublime defiance of the dogma that *Nothing can come out of Nothing*.

Le Trosne endeavours to point out why Labour, or Personal Services, are not Wealth. Because, he says, they are only relative to the person ; they are not transmissible, nor inheritable, nor transfer-

able; they do not result in a product which can be transferred, and whose value can be determined by competition; whereas products have a value in themselves, and acquire one by industry, which may be resold.

But the answer to this is clear. The essence and principle of Wealth is solely *Exchangeability*, and if a quantity can be exchanged once, and is paid for, it is Wealth. There is no necessity that it should be transmissible, or inheritable, or transferable. By the *Law of Continuity*, if it is Exchangeable once it is as much Wealth as if it were transferable a hundred times, and inheritable. A baker bakes a bun, and a customer comes in and buys it, and eats it. It is destroyed, and cannot be resold or inherited; it was only exchanged once. But had it no value? And was it not Wealth? Suppose a person does a service, and is paid a pound for it, and a baker sells a pound's worth of bread, is not the service equal in value to the bread? What does it matter to either of these persons how soon their product is destroyed, so long as they are paid for it? Le Trosne's argument is a direct violation of the *Law of Continuity*.

Le Trosne is equally unsuccessful in his endeavour to exclude Credit from the title of Wealth.

He admits that the quality of Wealth depends purely on Exchangeability, but distinguishes between Money, which has *Intrinsic* value, and bills which have only value from the presumed solvency of the debtor.

Le Trosne himself says that Value is not a quality absolute and inherent in things, but proceeds entirely from *Exchangeability*. Hence, to speak of Money having Intrinsic Value is evidently a contradiction in terms (**Value**). Money has no value except what people agree to give in exchange for it; and if it were placed among a people who would give nothing for it, it would have no value, as the author of the *Eryxias* pointed out long ago. A bill has value for precisely the same reason that money has, namely, that the debtor is bound to give money for it at a certain time. It is true that if the debtor fails the bill loses its value, but that is just what happens to money if it is placed where it cannot be exchanged. Hence, both money and a bill have value for the same reason, and lose their value under the same circumstances. Hence, it is clear that the value of money is only more general than that of a bill. It is only a difference in degree, but not in kind.

Moreover, a Credit in any form, written or unwritten, may endure for any length of time until it is paid off and extinguished; it may be transferred any number of times, and it is inheritable.

Now it is not surprising that Quesnay, who was a physician, should not have rightly apprehended the nature of Credit. But Le Trosne was an advocate; he must have studied Roman Law. He must have known that Incorporeal Property of all sorts, Rights and Rights of Action, are expressly included under *Pecunia, Bona, Res, Merx*, in Roman and in every system of Law; and, therefore, we may well feel surprised at his difficulty in admitting Credit to be Wealth.

In fact, the Economists fell into exactly the same error with regard to Credit as they had delivered the world from with regard to Money. In the reaction against the Mercantile System, it was said that Money is only a Sign, or Representative, of wealth. The Economists shewed that Money is not a Sign, or Representative, of Wealth, but an actual species of Wealth, or merchandise, itself.

But they saw that though a species of Wealth itself, its use is to be exchanged for other things. Hence, they repeatedly called it an Order, or Bill of Exchange, or a Title to be paid in money.

Now, Le Trosne says that Credit is not Wealth, but only a Title to be paid in Wealth.

It is somewhat remarkable that it escaped the sagacity of the Economists that if Money be an Order, or Title, or Bill of Exchange, it follows that a Bill of Exchange, or other form of Credit, must be a species of Money. For Credit bears the same relation to Money that Money does to goods, as the great American Jurist, Daniel Webster, found out long ago. And as Money is not a Sign, or Representative, of goods, but is exchangeable for them, so neither is Credit the Sign, or Representative, of Money, but is separate and independent merchandise, which is exchangeable for Money. Incorporeal Property of all sorts is a mass of Exchangeable Property, or merchandise, and is the subject of the most gigantic commerce in modern times, and can by no possibility be excluded from the general Science of Exchanges, or Commerce.

Under the article Wealth, we have shown what a facile answer can be given to the dogma of the Economists that man can create Nothing, and that *Nothing can come out of Nothing*.

The doctrine of the Economists that agricultural Labour is the only species of Productive Labour was not mere logomachy. They based their whole theory of taxation upon it; they maintained that all taxation should be laid directly on the *Produit Net* of land, and that all other classes of persons should be exempt. But we may say that as they maintained that all commercial profits are made at the expense of the State, it seems very strange to hold that all these

profits should be exempted from contributing to the wants of the State. And further, as they held that all these profits are obtained at the expense of the original producers, it seems very hard that all taxation should be laid on the unfortunate producers, and that all those who made profits at their expense should go free.

Agricultural producers had, therefore, the greatest interest in inquiring if the doctrine of the Economists was true, that agriculture is the only form of Productive Labour.

One great merit the Economists had, they clearly defined every term they used. Their doctrines seemed to be logically unassailable, provided that their fundamental dogmas were right. But their doctrines provoked inquiry and reaction; men who were labouring in all sorts of vocations which were useful to the community, were roused to indignation at being stigmatised as sterile and unproductive. Men were astounded to hear that a nation cannot be enriched by Labour and Commerce. The consequences which the Economists drew from their doctrine were so startling, and so contrary to patent, undeniable facts, that clear-sighted men began to inquire, Is it true that in an Exchange, or Commerce, neither side gains?

The Economists founded a New Order of Sciences.

The Economists have the immortal glory of having founded a New Order of Sciences, and having realised the conception of Bacon, that the Sciences of Society must be studied with exactly the same care, and by the same methods, as the Physical Sciences are, and that the study of the Physical Sciences must precede the study of the Sciences of Society.

They established absolute freedom of Commerce in every particular on a great moral basis as the fundamental right of mankind, proved to be true equally by reasoning and experience; and they only missed the glory of seeing it established as national policy by the French Revolution. In 1774, Turgot, the most illustrious friend of Quesnay, was appointed Prime Minister of France, and had the satisfaction of abolishing all restrictions on the internal commerce and export of corn, and was thus enabled to gladden the heart of his dying master by seeing the first-fruits of his philosophy. And although this great man was driven from power by the selfish aristocracy whom he would probably have saved from the catastrophe which was impending over them, Free Trade doctrine had made such progress, that in 1786 Mr. Pitt concluded a treaty with France, by which all impediments to the free intercourse between the nations and all their

possessions were abolished, and only subject to the payment of moderate duties.

But the deluge of the French Revolution swept away this beneficent work, and replunged the nations into Economic darkness, from which England only began to emerge in 1822; and the glory of finally assuring the triumph of Commercial liberty in England accrued to the disciples of Adam Smith.

It is sometimes urged that the Economists made the science of Political Economy too dogmatic, or *à priori*. But this censure must be taken with a qualification. If we knew *all* the true principles of all things, then science would be entirely *à priori*. As Bacon long ago pointed out, the very perfection of science is to attain the *à priori* state; and the more true principles are discovered, the more it approaches the *à priori* state. Now the Economists, contemplating the position of man on the earth, and the evident intention of the Creator, arrived at the principle *inductively* that Freedom of Person, Opinion, and Contract, or Exchange, are the fundamental rights of mankind, most conducive to human happiness, increase, and improvement, and that all violations of them are injurious to the human race.

Adopting, then, these fundamental principles, they found a state of society existing, altogether violating these rights, and, therefore, afflicted with innumerable evils. And has not history amply vindicated their doctrines? For what have brought the greatest evils on men? Slavery, Religious Persecution, and Commercial Restrictions. During the last 1800 years, what have been the causes of the greatest number of wars? History answers—Religion and Commerce. If the doctrines proclaimed by the Economists had always been held to be true, as they now are by all enlightened persons, nine-tenths of the wars which have desolated the earth during the last eighteen centuries, would never have occurred.

The great speculators of the middle ages held the material world in low esteem, as unworthy of the attention of philosophers. But it is the glory of the Baconian Philosophy to have extended the dominion of mind over matter, and brought into subjection and turned to profit, the forces of Nature. The philosophers who proclaimed that Law is of Divine institution, and that there is a system of law which is innately right, anterior to all human laws, confined their ideas to moral rights. But it is the glory of the Quesnayan, or Economical Philosophy, to have shewn that there is a great moral relation existing, not only among men, but connecting man with the material world, most intimately connected with the

well-being of the human race, which is capable of being discovered and established by human reason, as well as any of the other sciences, which are rightly considered as the triumphs of the human intellect. Thus Bacon extended the dominion of mind over matter, and Quesnay ascertained the rights of man relating to matter.

The Philosophy of the Economists differs from all others in taking the individual man as the basis of society. Almost all other systems hold the individual as subordinate to society, and it is certain that individual property is not that which originally prevailed throughout the world. But instead of sacrificing man to society, the Economists declared that society is only instituted for the purpose of preserving and defending the rights of the individual. "Governments," says Turgot, "are apt to immolate the well-being of individuals to the pretended right of society. They forget that society is only made for individuals, and that it was only instituted to protect the right of all in insuring the performance of mutual duties."

How much in advance of their age the Economists were, can only be appreciated by those who will take the pains to acquire a knowledge of the state of society and opinion, when they lived. It is manifestly quite impossible to give any adequate picture of that in the limits of this work. It is sufficient to say that they were the leaders of mankind in that great change or movement, as it has been called, of society from *Status to Contract*, and their principles are constantly gaining influence throughout the world. Therefore, although certain portions of their doctrines may be erroneous, and have been set aside by subsequent Economists, they are entitled to imperishable glory in the history of mankind.

Condillac—Adam Smith.

The amazing doctrine of the Economists, that neither the industry of artisans nor commerce enriches a nation—so contrary to the plainest facts of history, but which they maintained with incomprehensible obstinacy—naturally produced a reaction against them. Men began to inquire whether their dogma, that in an exchange neither side gains or loses, upon which these assertions rested, was true. Moreover, men who were performing services for the public were indignant at being stigmatised as sterile and unproductive. The first to declare against them were the Italian Economists; but in so very general an outline as this we have no space to give an account of them, as they never formed a distinct school. There was a cluster of writers, such as Verri,

Beccaria, Genovesi, Delfico, and many others, who ardently advocated Freedom of Trade, but they never formed a school, as the French and English Economists did; and no Italian work was ever adopted as a national text-book, as Adam Smith, Ricardo, and Mill were in England, or J. B. Say was in France.

In the same year, 1776, appeared simultaneously two works which were expressly designed to overthrow the system of the Economists, viz., Adam Smith's *Wealth of Nations*, and Condillac's *Le Commerce et le Gouvernement*. These works, though apparently different in name, were similar in conception. They both begin by taking the Theory of Value, or of free commerce, as the natural order of things, and then afterwards consider the effects of interference by Government. They were the friends and associates of the Economists, and emanated from their school; but they both revolted against the doctrine that manufacturing and commercial industry do not enrich a nation. Moreover, they both maintained that in an exchange both sides gain. Smith's work attained immediate popularity, but Condillac's fell stillborn from the press, and never attracted the slightest attention,¹ and the whole subject of Economics was entirely forgotten in France after the fall of Turgot.

Condillac's is a very remarkable work, and deserves attention. It is called *Le Commerce et Le Gouvernement considérés relativement l'un à l'autre*. It is tinged in a few places with the errors of the Economists, but he rebelled against their classing artisans, manufacturers, and merchants as unproductive labourers. He also argued against the doctrine of the Economists, that in an exchange neither side gains or loses; on the contrary, he maintains that both sides gain, which Boisguillebert, the morning star of modern Economics, had asserted before him.

Condillac intended to have published three divisions of his work—the first, in which the principles of Economic Science, or Commerce, are explained; the second, in which the relations of Commerce, or Economics, to the Government, and their reciprocal influence over each other, are investigated—and under this division comes Taxation; and the third, containing a collection of practical examples showing the application of the principles developed in the two preceding parts. Unfortunately, the third part was never published.

Condillac begins at once by saying that Economic Science is

¹ M. Michel Chevalier did me the honour to say that I had discovered Condillac.

the Science of Commerce or Exchange, thereby only expressing the idea of the Economists as to the "Production, Distribution, and Consumption of Wealth" in a much more simple and intelligible form, and also, which is a great advantage, in one which is *General*; for the Science of Commerce must necessarily embrace all branches of Commerce.

He begins by investigating the foundation of the Value of things, and shows that it originates entirely from the wants and desires of men. This want, or estimation, is called **Value**.

As people feel new wants they learn to make use of things which they did not before. They give, therefore, value at one time to things to which at another time they do not.

Thus Condillac, in accordance with the ancients and all the Italian Economists (**Value**), places the origin and source of Value in the human mind, and not in labour, which is the ruin of English Economics.

But people have come to regard Value as an absolute quality which is inherent in things, independently of the opinion we have of them; and this confusion of ideas is the source of bad reasoning. Value is founded on Estimation.

Value, therefore, exists before an Exchange. Condillac blames the Economists for saying that Value consists in the relation of one thing exchanged for another. This criticism of Condillac's, however, is overstrained, because, unless there be an exchange, there is no manifestation of Value, there is no *phenomenon* which can be the subject of Economic Science. Economics has nothing to do with impotent desires of the mind which have no external manifestation, but only with effective desires which produce a phenomenon, or an effect. So dynamics has nothing to do with latent forces which give no outward sign of their existence, but only with the *phenomena* produced by forces. So Credit, in the popular sense, means the estimation of a man's solvency held by the public, but Economic Science has nothing to do with a man's Credit until he produces an Economic phenomenon by making a purchase with it. That is, until he makes a purchase by giving a Promise to pay in exchange for goods or services, and then that promise to pay, or right to demand payment, or Debt, is Credit in its legal, commercial, and economic sense.

Condillac lays down as a fundamental doctrine: "A thing has not value because it has cost much, as people suppose, but money is spent in producing it because it has Value." Every one of common sense will give his assent to this doctrine, and it is the

one by which Whately sent a deadly shaft into the Economics of Smith and Ricardo.

Condillac then shows that all variations in Value are caused by the variations in what is called the *Law of Supply and Demand*; and, therefore, there is no such thing as absolute price. The price varies from market to market, and is always settled by competition; and it is useless and dangerous to prevent these variations.

Condillac then shows how commerce augments the mass of riches. What, then, do merchants effect if, as is commonly said, an exchange is an equal value given for an equal value? If that were true, it would be useless to multiply exchanges, and there would always be the same mass of riches. It is, however, false that in an exchange the values are equal. On the contrary, each party gives less and receives more. If not, there could be no gain on either side. But both sides gain, or ought to do so, for this reason, that Value has no reference except to our wants, and that which is more to one is less to the other, and reciprocally. The source of error is in supposing that things have an absolute Value, and, therefore, people think that in an Exchange they give and receive an equal Value. Each, however, gives less and receives more, because he gives what he wants less, and receives what he wants more.

Condillac then discusses wages, and shows why wages differ in different employments. He defends the right of property and bequest. He discusses the nature and uses of Money, and agrees with the Economists. He observes that the use of Money as a measure of Value has given rise to the confusion about value. If men had continued to traffic by way of barter, they would have seen clearly that they always gave less and received more. But as soon as Money was introduced, they naturally thought that it was an exchange of equal values, because each was then valued at the same quantity of Money.

By means of Money the respective values of quantities of corn and wine may be measured, and then men see nothing in their values except the Money, which is their measure. All other considerations are lost sight of; and because this quantity is the same, they think that each of the quantities is equal in value. But the comparative gains of the parties are to be estimated by the intensity of their relative wants, and not by the absolute amount of Money.

The merchant buys things wholesale, and sells in detail, and receives back the price. Thus continual small sales replace the sum spent in purchasing in gross; and when this replacement is made, purchases are again made in gross, to be replaced in detail.

Money is, therefore, always being scattered to be again collected into reservoirs, as it were, from which it is again spread by a multitude of small canals, which bring it back to its first reservoirs, whence it is again scattered, and to where it again returns. This continual movement, which collects it to scatter it, and scatters it to collect it, is called **Circulation**. And this Circulation manifestly means an exchange at each movement. If there is no exchange, it is not *Circulation*. Mere transport of Money is not circulation. In circulation the money must, as it were, transform itself into something else. Credit, however, is used to a great extent instead of Money, and performs the same functions.

Condillac earnestly advocates universal Free Trade. He ridicules the idea of a million of gold and silver being wealth any more than a million of other productions. Products are the first wealth. What will you do if other nations, who reason as ill as you do, wish also to draw your gold and silver to themselves? That is what they will try. Every nation will, therefore, try to prevent foreign merchandise from coming to them. And if they succeed, it is a necessary consequence that their own merchandise will not go anywhere else. For wishing to keep each to itself all the profits of trading, they will cease to trade with one another, and thus they will lose all profits. Such is the effect of prohibitions. Who yet dares to be sure that Europe will open its eyes? I wish it would, but I know the force of prejudice, and I don't expect it. In short, commerce is not for Europe an exchange of works, in which each nation finds a profit; it is a state of war in which each tries to rob the other. They think, as they did in times of barbarism, that nations can only grow rich by robbing their neighbours.

Condillac having thus in the first part traced the grand outlines of Economic Science, and shown that universal Free Trade is the proper order of things, in the second part takes universal Free Trade as the basis of his argument, and examines in succession the mischievous consequences produced by all violations of, and attacks on, the principle. These are wars, custom houses, taxes on industry, privileged and exclusive companies, taxes on consumption, tamperings with the currency, government loans, paper money, laws about the export and import of corn, tricks of monopolists, the commercial jealousy of nations, and other things. The effects of each of these are examined with admirable skill.

Such is a brief outline of the first two parts of this work. The third was, unfortunately, never written. Although we have been constrained by our limits to give but a few points, the analysis we

have given will show the general scope of this excellent work, and its great importance is manifest, for it is the true foundation of modern Economics.

Condillac expressly declares the true function of Economics to be the Science of Commerce. And in dealing with the subject, we see the immense superiority of a mathematical and metaphysical mind; for he places the source of Value in the human mind, in wants and desires, or in **Demand**, as the ancients and the Italian Economists did; and having done so, he naturally shows that all variations in Value depend on variations in Demand and Supply. That is, he instinctively, as a physical philosopher, never dreams that there can be more than one fundamental theory of Value. He, as every physicist who really paid attention to the subject, would have been utterly aghast at the notion that the science could be based on six or seven fundamentally conflicting theories of Value, as is the fashion at the present day.

It is true that Condillac's work can by no means be considered as a complete treatise, and it requires immense development. But it lays down the broad, general outlines of true Economics. Smith's work and Condillac's were published in the same year. Smith's obtained universal celebrity in a very short time. Condillac's was utterly neglected, but yet in scientific spirit it is infinitely superior to Smith. It is beyond all question the most remarkable work that had been written on Economics up to that time, and it plays a most important part in the history of the science. The whirligig of time is now bringing about its revenges, for all the best European and American Economists are now gravitating to the opinion that Condillac's is the true conception of Economics. The beautiful clearness and simplicity, the instinct of the true physicist, are visible throughout; at length he will receive justice, and, after the neglect of 120 years, he will emerge as the true founder of modern Economics.

We have now to speak of Condillac's far more fortunate contemporary, Adam Smith, whose work originated from the same causes as Condillac's, namely, the doctrine that in an Exchange neither side gains nor loses; that no labour but agricultural is productive; and that the labour of artisans, manufacturers, merchants, and traders is sterile and unproductive, and does not enrich a nation.

Adam Smith, who first published a work on Economics which greatly influenced public opinion in this country, was born at Kirkcaldy, in Fifeshire, just opposite Edinburgh, on the 5th June,

1723, a posthumous son of the Comptroller of Customs there. He was sent to the University of Glasgow, where he gained a Snell exhibition to Balliol College, Oxford. He resided at Oxford seven years. In 1748 he delivered some lectures on rhetoric and *belles lettres* in Edinburgh, under the patronage of Lord Kames. In 1751 he was appointed Professor of Logic, and in the following year Professor of Moral Philosophy, in the University of Glasgow. In his lectures it is said that he advocated the doctrines of Free Trade, which were then widely adopted by the most enlightened men in France, Italy, and Spain. But no account of these lectures, not even one line of them, has been preserved, so that we have no means of comparing his views then with those he published in 1776. But even if he did teach Free Trade then, he was in no sense its creator. Many writers had advocated Free Trade long before him. The Economists published their code of doctrine in 1759, in which free exchange was asserted to be one of the fundamental rights of mankind, and there were numerous and powerful advocates of Free Trade in Italy and Spain, fifteen years before Smith published a line. Turgot carried out immense reforms in the direction of Free Trade in 1774. How did these writers and statesmen learn Free Trade from Smith, when his work was not published till 1776? Smith has himself done sufficient services to Economics, and his reputation does not require the advances and services done by other persons to be attributed to him.

In 1759 he published his professional lectures on the *Theory of the Moral Sentiments*, a work which gained a rapid reputation, and attracted the attention of the guardians of the young Duke of Buccleugh to him. In 1760 he accepted the appointment of tutor to the Duke, and in March, 1764, he set out with him for the Continent. Passing through Paris, he resided for about eighteen months at Toulouse. It is impossible to say whether Smith had any knowledge of the doctrines of the Economists while he was at Glasgow; but he must naturally have been attracted to them when in France. At Christmas, 1765, Smith and his charge went to Paris, where they stayed about a year. While there he formed an intimacy with the Economists, and held Quesnay, their chief, in such esteem, that he intended to have dedicated the *Wealth of Nations* to him, only he died before it was published.

At the end of 1766 Smith returned to Scotland, and settled at Kirkcaldy, where he remained ten years, during which he was occupied with the composition of the *Wealth of Nations*, which was published in 1776.

The *Wealth of Nations* is divided into five books, the first two of which only concern our present purpose, as giving the positive part of the Science as understood by him. The third book is on the different progress of opulence in different nations; the fourth book is a formal refutation of the Mercantile system, and the doctrines of his friends, the Economists; and the fifth is on the revenues of the State.

We have given an account of the way in which Condillac refuted the doctrine of the Economists, that in an exchange there is neither loss or gain on either side, because his work is very little known. We cannot give a full account of Smith's reasoning, because it would be too long for such a work as this, and every one can see it in the work itself. It is sufficient to say that by a course of masterly reasoning, far superior to that of Condillac, he demonstrated that in commerce both sides gain; and, therefore, that nations in multiplying their commercial relations, multiply their profits, and multiply their wealth; and that, as a necessary consequence, the labour of artisans, manufactures and commerce, all enrich a nation, and, therefore, that those who engage in them are productive labourers. Perhaps it may seem that the doctrine is so plain that it needs no proof; but that is far from being the case. At the time Smith proved it, it was a perfect paradox, contrary to the universal opinion of centuries.

Even if Adam Smith had never done anything else for Economics than this, he would have been entitled to immortal glory. Smith's doctrine is now the very corner-stone of Economics, and made a complete change in public opinion, and in international policy, which has for ever removed a perennial source of war from the world. Nations learnt that instead of destroying each other, and trying to ruin each other's commerce, it was their interest to promote each other's prosperity, and to multiply their commercial relations with each other.

Free Trade on a Moral and Economical basis.

The Economists established it as one of the fundamental rights of mankind that they should be allowed to exchange their products and services freely with one another. Now it is evident that when men agree to exchange their products and services, the arrangement of the price, or value, of the reciprocal products and services exchanged should be left entirely to the mutual agreement of the parties, the buyer and the seller. Who can tell so well as they what is the real

value of the product, or service, to them? Now when the price of the product, or service, is agreed upon and settled between the sole parties who are interested in it, suppose that some artificial force is suddenly directed against one of them, beyond what arises from their natural position, to oblige him to yield up more of his property to the other than he would do if the arrangement were left perfectly free—such a force suddenly put at the disposal of either party, whatever its nature be, whether moral or material, would clearly be unjust in its very nature, and would be nothing more than a license enabling one party to rob the other.

It may be asserted in the broadest possible terms that it is the natural right of every man to employ his industry, and the talents which Providence has given him, in the manner which he considers to be most for his own advantage, so long as it is not to the injury of his neighbour. He has the natural right to exchange the products of his industry with those of any other person who will agree to such an exchange, to buy from whom he will, and to sell to whom he can. A law which seeks to check the course of this free exchange is inherently wrong, and because inherently wrong, inherently mischievous. And though it may be permitted to take something from him for the necessities of the State, which is the guardian of the interests of all, a law which deprives one class of the community of a part of their property, in order to bestow it upon another class, is an intolerable violation of natural justice. If a person forcibly takes away a part of his property from another person, without any equivalent, it is simple robbery. In the same way, if a man wishes to sell any article, and can by any means force the buyer to pay a higher price for it than he otherwise would, it is simply despoiling him of part of his property, and appropriating it to himself.

Let us put this in a familiar way. Suppose that Richard Stubble lives in the country and grows corn, and that his friend John Smith carries on his business in town. Having some corn to sell, Richard proposes to have a transaction with his friend John. The free marketable value of the corn is, say, 40s. per quarter; but suppose that Richard has about a hundred times more influence over the Legislature than John has, and he gets them to pass a law by which he can compel John to pay him 50s. for what he could buy elsewhere for 40s. In that case he deprives John of 10s., representing so much of his industry, for which he gives him no equivalent, and takes it to himself. In the mediæval ages

lords and barons used to keep armed retainers, whom they used to plunder any unfortunate travellers who came within their power. In the nineteenth century, great lords and gentlemen made laws by which they forced traders to surrender to them a considerable portion of their property against their will. Where is the moral difference between the cases? When one man forcibly and unjustly deprives another man of his property, the precise law he may adopt for his purpose does not materially affect any moral aspect of the thing.

It is no argument to say that till comparatively recent times the slave system was established in this country, that it is still established in foreign countries, and that it was supported and adopted by men of unblemished character and integrity. It is absolutely wrong to say that we should not suffer our estimation of the moral character of men to influence our judgment as to the soundness of their opinions. There never prevailed a pernicious error in England which was not supported by the authority of men of personal excellence. It is, unfortunately, through the excellence of the men who adopted them that most of the bad principles which have done so much mischief in the world derived their fatal influence. The real question is not whether the men who hold certain opinions are estimable, but whether the opinions themselves are right or wrong. The fact is that questions are examined with far greater care and intelligence now than ever they were before; and by this more comprehensive investigation new considerations and relations are discovered, which may present them in very different lights than they are at first. Abstract right is every day obtaining greater force in legislation, and many of the most beneficial reforms of the present day have been to abolish and set aside the partial and unjust laws which encumbered the statute-book. It is not long ago that public opinion in this country tolerated the slave trade, and men of eminent piety saw no harm in stealing from their homes, and transporting them to foreign countries, even for the benefit of their masters. But public opinion has become convinced of its abomination, and not only put it down, but declared it to be a great crime. What was considered to be a legitimate traffic at the beginning of the century, is now declared to be piracy, and Englishmen who engage in it are liable to be dealt with as pirates. Little more than a hundred years ago a gale came on, it used to be the custom to pitch the slaves overboard, like cattle, and this was related in a court

of law without eliciting the slightest comment. Now, at bottom, there is not much difference in the ideas involved in protection and the slave trade. They both seek to effect the same object by somewhat different methods. They are both for the purpose of enabling one set of men to appropriate to themselves the fruits of their neighbours' industry—the one by the coarse method of fraud, the other by the somewhat more refined method of fraudulent taxation.

The protective system is, therefore, nothing more than a method by which producers endeavour to force consumers to pay a higher price than they otherwise would do for their commodities. Now let us consider a different case.

Suppose that the Legislature, being entirely composed of consumers, should pass a law forbidding the farmers to sell their produce above a certain price, or to export it to foreign countries, where they might find a better market for it. Or suppose that laws were made to prevent workmen demanding above a certain sum as wages, or compelling producers to bring their products to market, and accept a price for them much below what they would fetch if there were no such law. This would be a case on the part of consumers precisely analogous to what protection is on the part of producers.

This form of injustice did formerly prevail to a certain extent in this country, but it never acquired a distinctive name in our language as it did in France. During the height of the French Revolution, in 1793, when the insecurity of property had scared away almost all sorts of produce from the market, the French Convention passed the severest laws to limit the price of commodities, forbidding persons to sell their produce above a certain fixed price, whence they were called the laws of the *Maximum*. As might have been foreseen, these laws only aggravated the evil, and their disastrous effects are set forth with great minuteness in the third, fourth, fifth, and sixth volumes of Alison's *History of Europe* (seventh edition), though the author overlooks the fact that the very same objections apply against the system of protection, of which he is so strong an advocate.

Each of these systems, then, is erroneous, but in opposite directions—that of Protection, by which the producer obliges the consumer to buy from him his produce at a price above its natural value; that of the Maximum, by which the consumer obliges the producer to sell to him his produce at a price below its natural market value. Now every law whatever which interferes

with the natural course of trade, which attempts to regulate the wages of labour or the price of commodities, which attempts to meddle with the free exchange of industry or products between man and man, must necessarily fall under one of these forms of error. Every such law sins against natural justice, more or less, in one direction or the other, either as it assumes the form of Protection or the Maximum; and it is just as clear as the sun at noonday that the only true, just, and proper course is to establish and maintain absolute freedom of exchange.

The fact is, that both of these erroneous systems—Protection and the Maximum—as we pointed out forty years ago, and which is now generally recognised, are forms of Socialism. They are both especially designed for the very purpose of interfering with the natural value of commodities. Consequently, whichever of the parties is enabled to compel the other to part with his property at a different rate than what he would if unconstrained, is able to appropriate to himself a portion of the other's property. And this is the very essence of Socialism. Protection is the Socialism of producers; the Maximum is the Socialism of consumers. And nothing is more natural than to find that where the one doctrine is popular with one party, the other doctrine is popular with the other party. Of this we may see examples in foreign countries, where Protection is the creed of the State, and Socialism is the alarmingly-increasing creed of the people.

Now, the idea which was at the root of all this legislation was that Cost of Production should regulate Value, and that those who had produced articles had the right to have remunerative prices secured to them by law. This idea was a very natural one to occur to producers, and when we think of the condition of Parliament when this species of legislation was in fashion, it is not surprising that it prevailed. In the last century, it is true, there were at various times laws enacted for disturbing the natural course of commerce; but the corn laws, which lasted, with various modifications, until Sir Robert Peel abolished them, were enacted in 1815. Now, what was the state of Parliament at that time? One branch was entirely composed, as it still mostly is, of agriculturists; the other principally of agriculturists and the nominees of agriculturists, as well as great manufacturers, great merchants, great shipowners, and great producers of all sorts. It was entirely a Parliament of sellers—a vast, close, and corrupt combination. The great body of the people, *i.e.*, the consumers, had very little influence in the House of Commons. The sellers had a complete

monopoly of law-making, and their legislation was exactly what might have been expected. All the producers, in turn, were permitted to plunder the public for their own benefit. It was nothing more than a gigantic conspiracy of all the sellers against all the buyers. These laws were a striking proof that no single interest can be entrusted with the power to frame laws for the whole community in a spirit of justice; but, to ensure that, all interests must have a voice.

These considerations are, we think, sufficient to place the doctrine of Free Exchange on an impregnable moral basis, and we have now to consider the effect of Adam Smith's grand demonstration, that in commerce *both* sides gain. The Economists keenly maintained the right of free exchange; but from their doctrine, that in commerce neither side gains, this was but a barren truth. But Smith's demonstration, that in commerce *both* sides gain, put the matter in a much more striking and practical light. This, of all the services he has done to Economics, may be considered as his chief achievement—one which alone, from its stupendous consequences and effects on national policy, would entitle him to immortal glory.

The essence of Adam Smith's doctrine is that the wider and more extensive commercial intercourse is among nations, the more prosperous and wealthy they all become. Every one, in seeking his own advantage, benefits others as well; because if a man wants to acquire any object he must have to offer in exchange for it something which other people want. Different countries have different advantages for producing commodities for the enjoyment and satisfaction of mankind. It is the interest of the whole world that all commodities should be produced in those places where they can be obtained best and cheapest, and exported to those places where they can only be produced of inferior quality, and at a greater cost. Thus the whole world will obtain the greatest amount of enjoyments and satisfactions at the least labour and cost.

Thus absolute freedom of commerce and exchange throughout the whole world is the true nature of things. But when hostile tariffs are interposed they act at once as a barrier, and diminish the commercial intercourse of nations, to their mutual impoverishment. Protective tariffs are expressly made for the purpose of forcing commerce out of its natural course and development, and that alone is sufficient to condemn them. This is so obvious that we need not dwell on it further.

It is, however, necessary to correct an assertion which is by no means uncommon. It is well known that Cobden, in his wonderful campaigns, many times declared that if England would lead the way other nations would quickly adopt Free Trade. At that time there seemed every prospect that this hope would be realised. After his great victory in England, Cobden made a triumphal progress throughout Europe. Everywhere he was received like a great conqueror. The success of free trade legislation in England gave an immense stimulus to free trade doctrines in France, the birthplace and cradle of Economics and free trade. In 1846 and 1847 numerous Economists, among whom Michel Chevalier and Frederic Bastiat were the most conspicuous leaders, got up an association and agitation in France on the model of the Anti-Corn Law League in England, and excited immense enthusiasm. The movement had the best prospect of success when the French Revolution of 1848 broke out, and quickly set all Europe in a blaze. That of course extinguished all hopes of Free Trade. When thrones were rocking to their foundations, and crowns were tumbling in the dust, statesmen could give no attention to Economics. *Inter arma Economics silet.* And instead of Economics, the wildest Socialism got the upper hand. The Socialists knew instinctively that true Economics was their deadly enemy, so they abolished all the chairs of Economics in France. Under the fatal advice of Louis Blanc they established the *Ateliers Nationaux* (of which I have given an account in my *Dictionary of Political Economy*), where every workman was to be provided with work out of the resources of the State. But though the State could pay workmen to produce articles, it could not provide purchasers to buy them, so that, to prevent bankruptcy, the *Ateliers Nationaux* had to be suppressed, at the cost of the most terrible civil war ever raised in any city.

Napoleon III., with the advice and assistance of Rouher, Chevalier, Cobden, and Mallet, negotiated a commercial treaty with England in 1860, which considerably relaxed the protection system then established. But this treaty was carried by the autocratic power of the Emperor, and was utterly distasteful to the great mass of the French people, who were now mainly protectionist and socialist, which are one and the same thing. And, alas! France, which in the last century was the beacon to spread the light of free trade throughout the world, is now enveloped in the deepest darkness of protection and socialism; nor does there seem any immediate prospect of her emerging from it.

Fallacy of Reciprocity and Retaliation.

Now, a considerable number of persons, seeing that other nations not only have not followed the example of England, but, on the contrary, have retrogressed, and are now even more protectionist than they were in 1847, and that up to this time Cobden's hopes have been falsified, have maintained that what Cobden only regarded as a hopeful prospect was, in his view, the necessary corollary of England's adoption of free trade; and that as other nations have plunged deeper and deeper into protection and socialism, England should do so likewise. They clamour against what they are pleased to designate as one-sided free trade, and, under the specious names of reciprocity and fair trade, they are calling out for England to retaliate by enacting protective tariffs against those nations which have enacted protective tariffs against her, and so to do unto them as they do unto her. If this were carried out, England would have to revert to the darkest days of protection.

It has been frequently said that if Cobden were alive now, and saw the falsification of his hopes, he would advocate reciprocity and fair trade, as they are pleased to term it. But those who say so never studied Cobden's doctrines. Constantly and uniformly he inculcated that England ought to adopt free trade whether other nations did so or not, and even if all the world were against her, as is very much the case at present.

Having a perfect recollection of the great free trade discussions, I have no hesitation in saying that Cobden would have done nothing of the sort which the reciprocitarians and fair traders would attribute to him. His constant maxim was, that the *true way to fight hostile tariffs is by free trade*.

No doubt all these hostile tariffs are extremely exasperating. They inflict incalculable injury, not only upon the wealth and prosperity of England, but upon the nations themselves, and all others in the world. But if, as some hotheaded and inconsiderate persons urge, England were to resort to reciprocity and retaliation, she would merely double the mischief. If the present hostile tariffs destroy an incalculable amount of commercial intercourse, a resort to reciprocity and retaliation would destroy it infinitely more. As Sir Louis Mallet pithily said, "If one tariff is bad, two are worse." If foreign nations smite us on one cheek by their hostile tariffs, if we followed the advice of the reciprocitarians, and retaliated, we should simply smite ourselves very hard on the other cheek.

I will now endeavour to show that it is for the interest of this country to adopt free trade, irrespective of the policy of foreign nations, and that both the theories of retaliatory duties and reciprocity are erroneous.

In order to demonstrate this, let us suppose two cases. First, let us suppose that England and France have very few duties, or none at all, on each other's productions, and under these laws a certain amount of commercial intercourse takes place. Let us now suppose that, for some reason or another, France takes umbrage at England, and, in order to punish her, imposes heavy duties on English products. Without at present stopping to inquire what are the effects of this conduct on France herself, it is evident that the result is to limit the demand for English goods. It manifestly cripples British industry, and by this means a certain amount of injury is done to England. England, being irritated, begins to think of revenge, and just at that moment in comes a protectionist in a fit of blind, unreasoning passion, and cries out, "We must retaliate! Put a heavy tax on all French produce." In an evil hour England listens to protectionist advice, and places heavy retaliating duties on French produce, by way of punishing France. Suppose that from these duties £1,000,000 is raised. *Who pays this £1,000,000 of duties?* The protectionist, seeing that this sum of money is raised from these goods which belong to Frenchmen, and come from France, by some incomprehensible jumble of ideas calls this "taxing the foreigner," and thinks that he is making the Frenchman pay. But let us examine the case carefully. In the first place, who pays the import duties? It is quite clear that it is **not** the Frenchman who pays them, but the British consumer. The import duties are charged in the price to the consumer, and, therefore, by placing import duties on goods, *it is ourselves we tax, and not the foreigner*. Thus, England being irritated at French ill-temper, gets in a passion, and immediately fines herself £1,000,000.

The price of French produce being thus raised, of course limits the demand for it, and it injures France so far by crippling their industry, but *not* by making them pay the tax upon it. As, therefore, by placing retaliatory duties on French produce, we take less of it, they necessarily take less of ours in return; and this also still further cripples British industry, throws British workmen out of employment, causes less demand for British shipping, and, in addition to all this, raises a large sum by way of taxation on the British consumer, besides the inconvenience of either making

persons forego what they have been accustomed to, or by making them pay a higher price for it—reducing their means of purchasing other articles. By the method of retaliatory duties, when the Frenchman smites us on one cheek, we immediately hit ourselves an extremely hard slap on the other. The Frenchman, by his duties, does us an injury, and we, by retaliating, immediately do ourselves a great deal more; and, indeed, it would not be difficult to show that the country which imposes the duty does itself a great deal more injury than its antagonist. The same argument of course, apply to France.

Now let us take another case. Suppose that France and England, being afflicted with protectionist ideas, have mutually imposed heavy duties, not absolutely prohibitive, on each other's produce. Suppose that under these duties a certain amount of trade takes place between them; then England, being brought to understand that it is she herself, and not France, who pays the import duties, resolves to make a general reduction of her import duties without waiting for France to alter hers. By this means the price of French produce is lowered to British consumers, a greater demand for it takes place, and the French producers have more money to spend. Then they in turn take more goods from England, and this sets British industry in motion, gives employment to British workmen and to British shipping. Is it not clear, therefore, that it is for the advantage of England to lower her duties, whether France does so or not? By lowering the duties we are taking the burden off our own backs, and not that of the foreigner, though of course it benefits him too, as it gives him more employment. If the foreigner could be induced to do so too, it would still further increase the mutual benefit. It may be laid down certainly, as a rule, that the country which raises or lowers its import duties injures or benefits itself much more than it injures or benefits its neighbour. And has not all this been found to be true by experience? And now let us ask who are the true "friends of British industry"—the protectionists or the free traders?

The first of these cases shows the mischievous operation of retaliatory duties, and the second the fallacy of the reciprocity theory, and they completely demonstrate the free trade axiom which is so sore a puzzle to protectionists—*The true way to fight hostile tariffs is by free imports.*

Retaliation, then, is not to be thought of. England may just fume and fret, but she must keep her temper and possess her soul in patience. There is no remedy but time and patience.

When protectionist policy once gets the upper hand, the natural tendency of its advocates is to strain it till it cracks. When protectionists do not reap the benefits they expect from protection, their constant cry is for more, and always more, protection. We see this in Russia, Germany, France, Italy, and, most conspicuously, in the United States. In this last-mentioned country they at last perceived that they had bent the bow too far, and they have recently somewhat relaxed the strain; but how long they will continue in this mood no human being can tell. But whatever other nations may do, England must endure to the end, and steadily keep the light of free trade burning amid despondency, gloom, and darkness, in the hope that time, experience, reflection, and example may bring other nations to a better frame of mind.

We are happy to be able to support these views by a passage written by one of those illustrious Scots who were an undying honour to their own native land, and an unspeakable blessing to those nations they were called to rule — Sir Thomas Munro, Governor of Madras. In 1825, writing to a friend, he says: "There is another point on which anxiety is shown where I think there ought to be none—I mean that of other nations granting similar remissions on our trade. Why should we trouble ourselves about this? We ought surely not to be restrained from doing ourselves good by taking their goods as cheap as we can get them, because they won't follow our example. If they will not make our goods cheaper, and take more of them, they will at least take what they did before; so that we suffer no less on this, while we gain on the other side. I think it is better that we should have no engagements with foreign nations about reciprocal duties, and that it will be more convenient to leave them to their own discretion in fixing the rate, whether high or low."

So wrote this sagacious Scot in 1825, by which it will be seen that he completely anticipated Cobden's arguments, and in other respects the ideas he put forth then are only now being realised in India.

One example alone is sufficient to prove the truth of this policy. Even in former times, when all nations were protectionist, there were always a certain number of free cities, and their wealth and prosperity, while all nations were weighed down with protection, completely establish the truth of the doctrine of Sir Thomas Munro and Cobden. And if free cities were enabled to prosper, while all the rest of the world was protectionist, does not the same argument apply to England? If so be, England must continue to the end as the free port and market of the world.

A war of tariffs is only one degree less injurious than a war of sabres and cannon.

Thus we see how true Economics throws a clear and steady light on the path of national policy.

On Smith's Definition of Wealth.

Having thus set forth Adam Smith's magnificent services to Commerce in general, and their effects on international policy, we must now inquire more particularly into his conception of the positive science itself. The first book is on what he calls Production and Distribution, but in reality it is the Theory of Value, or of Commerce, in accordance with the meaning given to the expression by the Economists. And as the word Wealth is the basis of the whole science, we must investigate what Smith means by **Wealth**.

It is somewhat strange that though Smith entitles his work "*An Inquiry into the Nature and Causes of the Wealth of Nations*," he nowhere tells us what he means by **Wealth**. Whately has well observed that Smith's title supplies only a name for the subject matter, and not for the science itself.

We must now endeavour to collect what Smith meant by "Wealth." We must remember that by **Wealth** the Economists meant the *Material* Products of the earth which are brought into Commerce and exchanged, and those only. They expressly excluded **Labour** and **Rights** from the term Wealth; thus, they made **Labour**, **Materiality**, and **Exchangeability** as necessary to Wealth, but of these they made Exchangeability as the real essence of Wealth, and Labour and Materiality only as the accessories or accidents of Wealth, because they excluded the material products of the earth which were not brought into commerce and exchanged from the term Wealth.

Smith does not anywhere expressly define Wealth, but at the end of the Introduction he speaks of "the real Wealth of the country—the *annual produce of the Land and Labour of the society*" and from the number of times he repeats this phrase, we may assume that to be very much his idea of it, especially as it was an expression in common use by the Economists of other countries.

But it is to be observed that Smith has entirely omitted Exchangeability from his description of Wealth in this place.

Now, upon examining this expression, it is very evident that

it is ambiguous. It is not clear whether it means the annual produce of land alone, and the annual produce of labour alone, or the annual produce of land and labour combined. It is probable that he meant the latter.

Whichever way the expression is interpreted, it is manifest that it is far too wide, because if it be laid down absolutely that "*the annual produce of land and labour*," either separately or combined, is Wealth, then every useless product of the earth is Wealth as well as the most useful—the tares as well as the wheat. If a diver fetches a pearl oyster from the deep sea, the shell is as much the "produce of land and labour" as the pearl itself. So if a nugget of gold or a diamond is obtained from a mine, the rubbish it is found in, and brought up with, is as much the "produce of land and labour" as the gold or the diamond; and innumerable other instances of this sort might be cited.

So also every useless work done would be Wealth. Thus, if a number of labourers were to raise a mound in Salisbury plain, or build a palace in the middle of the Sahara, that would be Wealth. The simplest example of the "produce of land and labour" is children making dirt pies; so that if this definition of Smith's is to be accepted, the way to augment the Wealth of the country would be to set all the dirty children in it to make mud pies!

Moreover, this definition is far too narrow. The land itself on which a city is built is Wealth. The owners of it obtain a great revenue by simply allowing other people to build houses on it. The land on which London is built is worth thousands of millions of money, and the land itself is certainly not the "annual produce of land and labour," either separately or combined.

Moreover, cattle and flocks and herds are of great value, and are Wealth; and how are flocks and herds and cattle the "annual produce of land and labour"?

There are besides many species of timber trees which are of great value as they stand on the ground, before any person has touched them. How are they the "annual produce of land and labour"?—unless, indeed, we agree with M'Culloch, that the growth of a tree is labour!

So, many other examples might be cited.

Smith classes Human Abilities, or Labour, as Wealth.

Moreover, under the title of "Fixed Capital," Smith enumerates "the **acquired and useful abilities** of all the inhabitants or members of the society. The acquisition of such talents by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a **Capital** fixed and realised as it were in his person. These **Talents** as they make a part of his **Fortune**, so do they likewise of that of the society to which he belongs."

So also he says:—"The Property which every man has in his own **Labour**, as it is the original foundation of all other property, so it is the most sacred and inevitable. The Patrimony of the poor man lies in the strength and dexterity of his hands."

These passages entirely coincide with the argument of the *Eryxias*, already cited, and given in the article **Wealth** in the following book. Thus it is seen that Smith expressly classes Human Abilities, or Labour, as Wealth. Now Human Abilities are certainly not the "produce of land," nor are they the "produce of land and labour" combined. It may be said that acquired abilities are the produce of Labour, but certainly natural abilities are not the produce of Labour, nor are abilities natural or acquired the "annual produce of land and labour."

Thus Smith has already broken away from the doctrine of the Economists that Wealth is to be restricted to the *material produce* of the earth, because they especially excluded Labour from the title of Wealth. And now we see the inconvenience of the nomenclature of the Economists. Labour is an exchangeable commodity. It may be bought and sold, it has value, and its value may be measured in money. But how are we to speak of the "Production, Distribution, and Consumption" of Labour?

Thus Smith, in these and many other passages, expressly acknowledges Labour, or the second order of Economic Quantities, to be Wealth; and he has a chapter discussing Wages as the Price of Labour.

Smith admits Rights to be Wealth.

Hence the definition of the Science of Economics as the "Production, Distribution, and Consumption of Wealth" has received a very awkward wrench by admitting Labour into it as Wealth. But more remains behind. For under the term Circulating Capital

Smith expressly includes Bank Notes, Bills of Exchange, and other securities, which are merely Rights of Action recorded on paper. But these Rights of Action are Credit: hence Smith expressly includes Credit under Capital.

He says—"A particular banker lends among his customers his own Promissory Notes to the extent, we shall suppose, of a hundred thousand pounds. As these Notes serve all the purposes of money, his debtors pay him the same interest as if he had lent them so much money. This is the source of his gain. Though he has in general in circulation, therefore, notes to the extent of a hundred thousand pounds, twenty thousand pounds in gold and silver may frequently be a sufficient provision for answering occasional demands. By this operation, therefore, twenty thousand pounds in gold and silver perform all the functions which a hundred thousand would otherwise have performed. The same exchanges may be made, the same quantity of consumable goods may be circulated and distributed to their proper consumers by means of his promissory notes to the value of a hundred thousand pounds, as by an equal value of gold and silver money."

Again,—“Let us suppose, for example, that the whole circulating money of some particular country amounted at a particular time to one million sterling, that sum being then sufficient for circulating the whole annual produce of their land and labour. Let us suppose, too, that some time thereafter different banks and bankers issued promissory notes payable to bearer to the extent of one million, reserving in their different coffers two hundred thousand pounds for answering occasional demands. There would remain, therefore, in circulation eight hundred thousand in gold and silver, and a million of bank notes, or eighteen hundred thousand pounds of paper and money together.”

Again,—“A paper money, consisting in bank notes issued by people of undoubted credit, payable on demand, without any condition, and, in fact, always readily paid as soon as presented, is, in every respect, equal in value to gold and silver money, since gold and silver money can at any time be had for it. Whatever is either bought or sold for such paper must necessarily be bought and sold as cheap as it could have been for gold and silver.”

These extracts are quite sufficient to prove the point we are enforcing, that Smith admits one class of Rights to be Circulating Capital, or Wealth. He puts a million of notes on exactly the same footing as an equal amount of gold and silver. He admits that bankers, by issuing a million of notes, augment the mass of

exchangeable property to that amount. Now what are these Bank Notes? They are simply so many circulating Rights of Action, Credits, or Debts. They are the species of Property termed **Credit**, and thus we see that Smith classes Credit under the term Capital.

This class of Rights, however, is only one of a gigantic mass of various kinds of Rights, which, since Smith's time, have increased in a vastly greater ratio than material property. At the present time the property of this nature of different kinds amounts to scores of thousands of millions of money. It is termed Incorporeal Property, or Incorporeal Wealth.

Now these Rights of Action, Credits, or Debts, as well as the gigantic mass of other kinds of Rights which are bought and sold, are certainly not the "annual produce of land and labour."

Hence we see that Smith classes both Labour and Rights under the title of Wealth, which the Economists expressly excluded from that term; and thus he completely overthrew the doctrine of the Economists and others, that the earth is the only source of Wealth.

Thus we see that Smith's definition of Wealth as the "annual produce of land and labour"—assuming that we have interpreted him correctly—entirely fails. It is at once far too wide and far too narrow. It includes a mass of things which can by no means be called Wealth, and it excludes by far the greater portion of what Smith himself classes as Wealth.

Such a definition of Wealth, too, is also open to another manifest objection, which is patent from his own work. For if it be laid down absolutely that the "annual produce of land and labour" is Wealth, it clearly follows that if anything be produced by "land and labour," it must be Wealth in all times and in all places: that what is once wealth must always be wealth. But universal experience shews that such a doctrine is utterly erroneous: and it was one of the points expressly enforced by Socrates in the *Eryxias* that anything is Wealth only where it is wanted and **Demanded**, that is when and where it is *χρήσιμον*.

And after laboriously inculcating through several hundred pages that Land and Labour are the essentials of Wealth, Smith admits this. He says—"a guinea (which may be admitted to be the produce of land and labour) may be considered as a **Bill** (*i.e.* a Right) for a certain quantity of necessaries and conveniences upon all the tradesmen in the neighbourhood. The revenue of the person to whom it is paid does not so properly consist in the piece of gold as in what he can get for it, or in what he can exchange it

for. *If it could be exchanged for nothing it would, like a Bill upon a bankrupt, be of no more value than the most useless piece of paper.*"

Thus, after all, Smith admits that **Exchangeability** is the real essence of Value and Wealth.

The incongruity of Smith's conception of the very word, which is the basis of the whole Science, is thus apparent. For several hundred pages he contends that the "annual produce of land and labour" is absolute Wealth, and then at last he says that unless it is **Exchangeable** it is not Wealth at all.

So far, however, he makes Labour and Materiality as necessary to Wealth, and in this he is still under the bondage of the Economists; but afterwards he classes human abilities as Wealth, in which there is certainly no Materiality, nor does it seem accurate to class Labour itself as the produce of Labour; and after that again he classes Rights of action, credit, and of course other Rights as Wealth, in which there is neither Labour nor Materiality.

It is manifest that these two fundamental concepts of Wealth do not coincide: for there are many things which are the produce of Land and Labour, which are not exchangeable: or which are exchangeable only in some places and not in others, and at some times and not at others: and there are stupendous masses of Exchangeable Property—nay, in this great commercial country enormously the greater portion—which are in no way whatever the "produce of land and labour."

The utter incongruity of ideas in the beginning of Smith's work with these in the later half has often been observed. Ricardo has adopted the former half of the work, and Whately the latter half. Ricardo adopts Labour as the essence of Value and Wealth, and Whately adopts Exchangeability. The latter part of Smith's work is utterly incongruous with the first. In accordance with the unanimous doctrine of antiquity we adopt Exchangeability as the sole essence and principle of Wealth, and it follows that there are three orders of Economical, or Exchangeable, Quantities as the ancients shewed, and as Smith has admitted.

This is the second service Smith has done to Economics. He broke through the narrow dogma of the Economists that it was to be restricted to the Exchanger or Commerce of the *material* products of the earth only, and enlarged it so as to embrace all Exchangeable Quantities and all Exchanges.

Smith also overthrew the dogma of the Economists that agricultural is the only productive labour; he shewed that the labour of artisans, manufacturers, and commerce are all productive, and enrich a nation.

Many persons might find a difficulty in understanding the scope and the purpose of Smith's first two books, but he himself says that his object is to investigate the principles which regulate the exchangeable value of commodities. Thus, it is seen that the subject-matter of the first two books of the *Wealth of Nations* is a treatise on commerce, or the Theory of Value, and his Editor, McCulloch, says in a note, "this science might be called the *Science of Values*."

Such are the main outlines of Smith's services to Economics.

Confusion of Smith on Value.

But, unfortunately, great as are Smith's services to Economics, it may be questioned whether the mischief he has done to the science does not, at least, counterbalance them.

We have now to direct the student's attention to the irretrievable confusion he has caused to the science by his self-contradictions on Value in Book I. chap. v. Of this chapter, Horner says¹: "We have been under the necessity of suspending our progress in the perusal of the *Wealth of Nations*, on account of the insurmountable difficulties, obscurity, and embarrassment, in which the reasonings of the fifth chapter are involved . . . the discovery that I did not understand Smith, speedily led me to doubt whether Smith understood himself."

From the earliest antiquity every writer has seen that the Value of a thing is something else external to itself, for which it can be exchanged.

So in Book I. chap. v., Smith begins by saying that the Value of any commodity is equal to the Quantity of Labour which it enables him to command or purchase. Hence, if l denotes labour,

$$A = l, 2l, 3l, 4l \quad . \quad . \quad .$$

He then says in the next paragraph that is the same thing as saying that it is equal to the Produce of labour it enables him to purchase: or, denoting produce by p , we have

$$A = p, 2p, 3p, 4p \quad . \quad . \quad .$$

And in the next paragraph he says that the Value of anything is more frequently estimated in Money than either in labour or commodities: or, denoting Money by m ,

$$A = m, 2m, 3m, 4m \quad . \quad . \quad .$$

¹ *Memoirs and Correspondence of Horner*, vol. i. p. 163.

Now, though it has been pointed out that these modes of estimating the Value of a quantity are by no means identical, we observe that in this passage Smith defines the Value of a thing to be something external to itself. The Value of a thing is some *other* thing for which it can be exchanged. Hence, it is manifest that the Value of A must vary directly as *l*, *p*, or *m*. The greater the Quantity of *l*, *p*, or *m* that can be got for A, the more valuable is A: the less of *l*, *p*, or *m* that can be got for A, the less valuable is A. It is also perfectly clear that if any change whatever takes place in the exchangeable relations between A and these Quantities, the Value of A has changed.

Hence Smith admits that Value, like distance, requires two objects: if any change takes place in the position of either of these, the distance between them has changed: no matter in which the change has taken place. So if the exchangeable relation between two Quantities changes, their value has changed, no matter in which the change takes place.

Hence it is clear that there can be no such thing as **Invariable Value**. Nothing whatever can by any possibility have an Invariable Value unless the relations of all other things are fixed also.

Hence we can at once see that by the very nature of things there can be no such thing as an invariable Standard of Value by which to measure the variations in value of other things, because, by the very nature of things, the very condition of anything being invariable in value is that nothing else shall vary in value: and consequently the very condition of there being an invariable standard is that there shall be no variations to measure.

Nevertheless, a very large body of Economists have set out upon this wild-goose chase—this search after an Invariable Standard—which it is utterly contrary to the nature of things should exist at all.

Directly after the passages we have referred to, Smith commences the search for that single thing which is to be the Invariable Standard of Value.

He says that gold and silver will not do because they vary in their value—sometimes they can purchase more and sometimes less labour and other commodities. Then he says: “But as a measure of quantity such as the natural foot, fathom, or handful, which is constantly varying its own quantity, can never be an accurate measure of the quantity of other things, so a commodity which is itself continually *varying in its own value* can never be an accurate measure of the value of other commodities. *Equal Quantities of Labour, at all times and places, may be said to be of equal value to the*

labourer. In his ordinary state of health, strength, and spirits, in the ordinary degree of his skill and dexterity, he must always lay down the same portion of his ease, his liberty, his happiness. *The price which he pays must* always be the same, whatever the quantity of goods which he receives in return for it [which, by Smith's own definition, is the Value of his labour]. Of these, indeed, it may sometimes purchase a greater and sometimes a smaller quantity, *but it is their Value which varies, not that of the labour which purchases them.* At all times and places that is dear which is difficult to come at, or which costs much labour to acquire; and that cheap which is to be had easily, or with very little labour. *Labour alone, therefore, never varying in its own value, is alone the ultimate and real standard by which the value of all commodities can at all times be estimated and compared.* It is their real price: money is their nominal price only.

"But though equal Quantities of Labour are always of equal value to the labourer (!!), yet to the person who employs him they appear sometimes to be of greater and sometimes of smaller value. . . ."

"Labour, therefore, it appears evidently, is the only universal, as well as the only accurate, measure of value, or the only standard by which we can compare the value of different commodities at all times and places."

The utter confusion of ideas in these passages is manifest. A foot or a fathom is an absolute quantity, and of course may increase or decrease by itself: but Value, by Smith's own definition, is a **Ratio**: and therefore we might just as well say that because a foot, which is varying in its own length, cannot be an accurate measure of the length of other things; therefore a quantity which is always varying its own *Ratio* cannot be an accurate measure of the *Ratio* of other things. The utter confusion of ideas as to the whole nature of the thing is manifest. We may measure a tree with a yard, because they are each of them single quantities: *but it is impossible that a Single Quantity can measure a Ratio.* It is manifestly impossible to say

$$a : b :: x.$$

It is manifestly absurd to say that 4 is to 5 as 8, without saying as 8 is to what: just as it is absurd to say that a horse gallops at the rate of 20 miles, without saying in what time.

Smith says that "Equal quantities of labour are always of equal value to the labourer."

Now, by his own definition, the Value of a thing is what can be got in exchange for it; consequently, if "equal quantities are always of equal value to the labourer," a man's labour must be of the same

value to him whether he gets £100 for it, or £50, or £10, or nothing at all!

The contradiction of ideas in this chapter of Smith's is palpable. He first defines the value of A to be the quantity of things it will purchase, and therefore, of course, varying directly as that quantity: and then he suddenly changes the conception of value to be the quantity of labour in obtaining A: and says that the Value of A is invariable so long as it is produced by the same quantity of labour! and that its Value is the same whatever quantity of other things it will purchase!

The word Value has been so misused by Economical writers, that it will be well to illustrate it by the use of another word of similar import whose meaning has not been so misused.

Value, like Distance, requires two objects, and we may present Smith's ideas in this form.

"As a measure of quantity, such as a foot, which is always varying its own length, can never be an accurate measure of the length of other things, so an object which is always varying its own *distance* can never be an accurate measure of the *distance* of other objects. But the Sun is always at the same *distance*. And though the earth is sometimes nearer the sun, and sometimes further off from it, the sun is always at the same *distance*. And though the earth is at different distances from the sun, it is the *distance* of the earth which has varied, and not that of the sun; and the sun alone, never varying its own distance, is the ultimate and real standard by which the distances of all things can at all times and places be estimated and compared."

Such is a fair translation of Smith's ideas, merely substituting *Distance* for *Value*. No wonder that Francis Horner says: "We have been under the necessity of suspending our progress in the perusal of the *Wealth of Nations* on account of the insurmountable difficulties, obscurity, and embarrassment in which the reasonings of the fifth chapter are involved."

But after saying that a thing produced by the same quantity of labour is always of the same value, no matter what it may exchange for: he says, speaking of Money in a subsequent passage, if it could be exchanged for nothing, it would be of no more value than the most useless piece of paper!

So, after all, Smith came back to Exchangeability as the test of value, and this confusion runs through the whole of Smith. One half the work is based upon Labour as the foundation of value, and the other half upon Exchangeability.

Having thus shown the confusion and contradictions of Smith on the two fundamental concepts of Economics, **Wealth and Value**, we have now to consider his notions on the Law of Value, or the Law which governs the exchangeable relations of Economic Quantities.

On this point, Smith never had the slightest idea that there can only be one General Law of Value, or General Equation of Economics; on the contrary, his work is full of a multiplicity of Theories of Value. He catches at a new Theory of Value for every class of cases he discusses. Consequently, his Theories of Value are a mass of contradictions, and, of course, he must sometimes be right. But his confusion and contradiction on the terms, Wealth and Value, and the Law of Value, which are the foundations of the whole science, render the work utterly useless as a general treatise on the science, fit to be placed in the hands of students. It was the necessity of determining general principles of Value which was one of the causes of Ricardo's work.

Stated in a broad, general way, Smith's chief merits are—

1. He shewed, by a course of masterly reasoning, which no one else approached, that in an exchange, both sides gain, which one or two Economists had casually observed before him, in contradiction to the doctrines that had prevailed before the Economists, that what one side gains the other loses; and the doctrine of the Economists, that in an exchange, neither side gains nor loses.

This is one of Smith's titles to immortal glory; for it at once removed from the science a doctrine which had been the cause of innumerable commercial wars, and shewed how utterly the Economists had under-estimated the advantages of commerce. It created a complete reversal of the policy of nations, because it shewed that nations were not interested in the destruction of their neighbours, but in their prosperity.

2. He burst the bonds of the narrow dogmatism of the Economists, that nothing but the material products of the earth are Wealth. In conformity with the doctrine which the author of the *Eryxias* had taught 2100 years before him, he recognised that Labour is Wealth, that it is a marketable commodity which may be bought and sold, and whose value may be measured in money. He has a long investigation of the Laws which govern Wages, or the price of Labour; thereby making Labour a most important department of Economics, which no one before him had done,

and which at the present day excites more discussion than any other department of Economics.

3. He demonstrates that the labour of merchants, traders, and artisans is productive, and enriches a nation; contrary to the doctrines of the Economists, who held that agricultural labour alone is productive.

4. He included Bank Notes, Bills of Exchange, &c., under the title of Circulating Capital, thus admitting that Credit is Capital. Now Bank Notes, Bills of Exchange, &c., are one class of Rights: they are Rights of Action, Credits, or Debts. He thus enlarged Economics to include all the three orders of Exchangeable, or Economic Quantities, as the ancients had done.

He has besides a multitude of sagacious observations, which are too numerous to be specified in a general outline of the science, such as the present.

In a broad and general way, his defects are—

1. The title of the work conveys no intelligible idea of its scope and purpose. It is only by a critical investigation that it is seen that it is the Theory of Value, as Whately has pointed out.

2. It has no clear and distinct settlement of Definitions, by which only a science can be constructed, and by which propositions can be affirmed or denied. His definitions of Wealth and Value, to name only the two fundamental terms of the science, are quite contradictory and irreconcilable, and the doctrines founded on them are a mass of confusion and contradictions.

3. He never had any idea that there can be only a single General Law of Value governing all the phenomena of commerce or exchanges. He has a multitude of Theories of Value, which is contrary to the fundamental principles of Natural Philosophy.

4. That though he extended the term, Productive Labour, to include the labour of merchants, traders, and artisans, he restricted the term to labour which realises itself in some material product which endures after the labour is ended. Whereas Productive Labour, as was seen by the Economists, means Labour which produces a Profit. Thus, Productive Labour means Profitable Labour, and all Labour which produces a profit is productive, no matter whether it is embodied in a material product or not. Thus all labourers, who earn an income, and make a profit by their labour, no matter of what kind it may be, are productive; all labourers who produce anything whatever which is wanted, demanded, and paid for, are productive labourers.

Sir Walter Scott enters a strong protest against Smith's doctrine, that Authors are not productive labourers, as well he, and innumerable other authors, might.

So Advocates, Physicians, Actors, Opera Singers and Dancers, Professors, Managers of commercial institutions, and multitudes of others, whose labours do not realise themselves in any material products, are all productive labourers, because their labours are wanted, demanded, and paid for, and thus produce them a profit.

5. Locke, as far as we are aware, originated the unhappy doctrine that Labour is the cause of all Value. Smith unfortunately commences his work by inculcating the doctrine that the wealth of a country is the annual produce of its "land and labour," and repeats this innumerable times through hundreds of pages. The doctrine that all Wealth and Value is the produce of Labour, and that working men are the creators of all Wealth, has been the canker and the ruin of English Economics, and, as the Socialists themselves admit, is the foundation of that Socialism which has now assumed such a menacing aspect in so many countries. The Socialists have failed to observe that Smith has quite contradicted himself in the latter part of his work, where he admits that Exchangeability is the real essence and principle of Wealth, in accordance with the unanimous doctrine of the ancients.

6. The confusion and contradiction of Smith's ideas on all the fundamental concepts of Economics has exercised a fatal influence on the whole of his work ; it is nothing but a chaos of contradictions.

One of these only has attracted much attention. In one part he affirms that the payment of rent enters into price, and thus causes an increase in the price of corn. In another part, he affirms that the payment of rent is the effect of price, and, therefore, does not raise the price. Hume was on his death-bed when the *Wealth of Nations* reached him, and he at once wrote to Smith to tell him that the payment of rent does not raise the price of corn. The same doctrine also was proved by Anderson, a practical farmer, who was an extensive writer on agricultural subjects, but Smith never made any alteration in his work. It was this glaring self-contradiction, among countless others, which was another of the causes which stimulated Ricardo to write his *Principles of Political Economy*.

7. Smith admitted that one class of Rights, Rights of Action, Credits, or Debts, are Circulating Capital, but he took no notice of other classes of Rights, which in recent times have increased at a much greater ratio than material property, and at the present day amount to scores of thousands of millions of valuable property.

8. He never made any attempt to give an exposition of the principles and mechanism of commerce. Thus, while he admits that Bank-notes, Bills of Exchange, &c., are Circulating Capital, he never had the slightest idea of the great juridical principles and organisation of the system of Mercantile Credit, the colossal business of Banking, and the Theory of the Foreign Exchanges. Now, taking the very title of his own work as the *Nature and Causes of the Wealth of Nations*, it is impossible to develop this without an exposition of the principles and mechanism of Credit, by which all Commerce and Trade is carried on; and which, as Daniel Webster has said, has done more to enrich nations a thousand times than all the mines of all the world.

On two points Smith's sagacity has failed him, and he maintained doctrines which were directly contrary to his own general principles, and which subsequent experience has shown that he was in error.

He strongly supported the Navigation Laws, which he admitted were contrary to the principles of Free Trade. But subsequent experience showed that they had become an intolerable nuisance, and were totally repealed in 1849, which was immediately followed by an enormous expansion of British commerce.

He also strongly supported the Usury Laws. In this he was far behind his friends, the Economists Turgot, Quesnay, and others, who pointed out their utter futility, and advocated their total repeal. Smith's doctrines were refuted by Bentham, in his splendid *Defence of Usury*. It has been said that this tract convinced Smith of his error; but yet he made no change in his work. The Usury Laws were totally condemned by a Committee of the House of Commons in 1819, and have now been entirely repealed in this country.

The most important Economical problems of the present day—Commercial Crises and Monetary Panics—had not arisen in Smith's day, which indeed was not his fault. But to investigate these, and bring them under scientific control, requires a thorough inquiry into the nature of Economics and its fundamental concepts, and then it will be seen that they can only be treated scientifically by adopting the conception of Economics as the Science of Exchanges or of Commerce.

Smith's work, then, can in no respect be considered as a work of Science; it is, rather, a vast mass of raw material, to be subjected to strict Economical inquiry.

It is not necessary to take notice of the three latter books of the *Wealth of Nations* in this place, because we are only concerned here with Smith's notion of the nature and objects of Economics.

We have now to mention two writers—(1) Ricardo, who adopted the doctrine of the commencement of Smith's work that Labour is the cause of Value, and (2) Whately, who adopted the doctrine of the latter part of it, that Exchangeability is the sole essence and principle of Wealth and Value.

RICARDO.

Ricardo, a very wealthy and highly-esteemed member of the Stock Exchange, first attained distinction as a writer in 1809. In that year the market, or paper, price of gold rose greatly above the Mint Price, and the Foreign Exchanges fell greatly. Ricardo published a pamphlet, entitled, *The High Price of Bullion a proof of the Depreciation of Bank Notes*, in which he revived the doctrine published by Lord King in 1804. Although this work commenced with several highly-erroneous statements, it most decisively proved its thesis. This gave rise to the appointment of the celebrated Bullion Committee in 1810, and its Report entirely adopted Ricardo's doctrine. But it aroused the warmest opposition from the Bank of England and the merchants, because it would have curtailed the nefarious profits of the Bank from issuing torrents of depreciated paper, and also the accommodation to the merchants. Under their influence, the House of Commons rejected the Report, and resolved that in public estimation a £1 note and 1s. were equal to a £1 note and 7s.; or, that 21 was equal to 27. This was followed by a stupendous controversy which has now sunk into oblivion. Nevertheless, the Report gradually won the assent of the mercantile public, and the mercantile evidence before the Bullion Committees of 1819 was just as strong in its favour as it had been against it in 1810. Ricardo greatly distinguished himself by his masterly evidence before these Committees, and his doctrine is now universally accepted by all sane men. The Bullion Report is one of the great landmarks in Economics.

Ricardo then published some minor pamphlets, which are now totally forgotten, but in 1817, encouraged by the reputation he had acquired, he adventured upon a much more extensive work, *The Principles of Political Economy and Taxation*, for which, unfortunately, he was totally inadequate.

Ricardo knew no classics, which are indispensable to the study of Economics, because almost all the fundamental concepts of Economics are to be found in Aristotle, the *Eryxias*, Demosthenes, and the Pandects of Justinian. He knew nothing of Mercantile

law, nothing of the great juridical principles and mechanism of the great system of Credit, nothing of the organisation of Banking. He had surprising quickness at figures and calculation, somewhat of the genius of the calculating boy, like Mr. Goschen. About twenty-five, he essayed mathematics, but he had no taste for it, and entirely abandoned it when he began to write on Economics, which was a fatal error, as he should just then have most deeply studied mathematics and natural philosophy, because Economics, according to his own view, being the Theory of Value, is a pure science of Variable Quantities, and its laws must be brought, as Bacon pointed out long ago, into strict harmony with the Laws of other sciences of Variable Quantities.

The incongruity of ideas on Wealth and Value in the *Wealth of Nations*, gave rise to two distinct classes of Economists, who adopt different halves of the work.

Ricardo gives no definition of what he means by the word wealth, which is the basis of the whole Science. He plunges at once into Value.

In Chap. I., Sect. I., he defines the Value of a commodity as *the quantity of any other commodity for which it will exchange.*"

He then says, "Adam Smith, who so accurately defined the original source of exchangeable value, and who was bound in consistency to maintain that all things became more or less valuable in proportion as more or less labour was bestowed on their production, has himself another standard measure of value, and speaks of things being more or less valuable in proportion as they will exchange for more or less of this standard measure. Sometimes he speaks of corn, at other times of labour as a standard measure, not the quantity of labour bestowed upon the production of any object, but the quantity it can command in the market; as if these were equivalent expressions, and as if because a man's labour had become doubly efficient, and he could therefore produce twice the quantity of a commodity, he would necessarily receive twice the former quantity in exchange for it."

Ricardo, therefore, deliberately rejects Exchangeability, and adopts labour as the cause and measure of Value.

Now, the principles enforced by Bacon and common sense shew that if one wants to construct a general Theory it is necessary to collect *all* the facts of the case—because, if even one be omitted, the little David, as Bacon calls it—that single fact may upset a theory founded on all the others.

To construct, then, a Theory of Value it is necessary to begin by

collecting all instances of Value. Now, as is shown under **Value**, Value is found in (1) Material Commodities, (2) Personal Qualities, (3) Abstract Rights.

But Ricardo begins by confining his attention only to *material* commodities—and not even all material commodities, but only those which are the product of human labour. That is, he proceeds to construct a General Theory upon only one particular department of Economics. Now, it is evident that such a proceeding is directly contrary to the fundamental principles of Natural Philosophy, and its results may easily be foreseen.

Ricardo, then, having restricted his inquiry to material commodities the result of Labour, maintains that Labour is the cause of Value, and Quantity of Labour is the measure of Value.

Ricardo, then, having begun by defining the Value of a commodity as “the quantity of any other commodity for which it will exchange,” lands himself in the conclusion that the “Quantity of Labour” embodied in producing a commodity is its Value!

He then says that “the quantity of labour bestowed on a commodity is, under many circumstances, an invariable standard, indicating correctly the variations of other things.”

Ricardo then starts on the search of the *Invariable Standard of Value*, which should itself be subject to none of the fluctuations to which other commodities are exposed. He says that it is impossible to be possessed of such a measure, because there is no commodity which is not subject to require more or less labour for its production.

Afterwards he says, “If equal quantities of labour, with equal quantities of fixed capital, could at all times obtain from that mine which paid no rent, equal quantities of gold, gold would be as nearly an invariable measure of value as we could in the nature of things possess. The quantity would indeed enlarge with the Demand, but *its value would be invariable, and it would be eminently well calculated to measure the varying value of all other things.*”

In a subsequent part of his work he says, “The labour of a million of men in manufactures will always produce the same value. . . . That commodity is alone invariable which at all times requires the same sacrifice of toil and labour to produce it.”

That is, Ricardo says, that the value of manufactures is always the same whether they sell for £100, for £10, for £5, or for nothing!

We doubt whether the manufacturers of Manchester would acquiesce in the doctrine that their manufactures are of just the same value whether they sell for large sums, or cannot be sold at all.

And after beginning by defining and several times repeating that the value of a thing is the *other* things it will exchange for, he ends by saying, "I cannot agree with M. Say in estimating the value of a commodity by the abundance of other commodities for which it will exchange."

Ricardo, therefore, begins by defining the value of a thing to be something external to it; and then he ends by describing it to mean the quantity of labour, or cost of production, bestowed on obtaining it.

Ricardo's doctrine that Labour is the cause of all Value is a curious example of how able men can be blind to what is going on under their own eyes. Ricardo was a very wealthy man: and of what did the greater part of his wealth consist? Evidently of stocks and shares, which were mere abstract Rights to future payment. And can Labour be the cause of the Value of Rights to future payment?

The very first day that Bentham read the book he wrote to Ricardo to tell him that it was all founded on a confusion between **Cost** and **Value**.

We will now show the extraordinary conclusion into which Ricardo was logically led by his repeated declaration, that Labour is the cause of all Value.

He says: "In contradiction to the opinion of Adam Smith, M. Say, in the fourth chapter, speaks of the value which is given to commodities by natural agents, such as the air, the sun, the pressure of the atmosphere, which are sometimes substituted for the labour of man, and sometimes concur with him in producing. But these natural agents, though they add greatly to *Value in use*, never add exchangeable value to a commodity . . . and they are serviceable to us by increasing the abundance of productions, by making men richer, by adding to value in use; but as they perform their work gratuitously, as nothing is paid for the use of the air, of heat, and of water they afford to us, *add nothing to Value in Exchange!*"

Now when logical reasoning from certain premisses leads to results which are notoriously false, and contrary to experience and fact, it is perfectly certain that these premisses must be erroneous. Nothing more is required to show the utter fallacy of the doctrine that human labour is the cause of all value than to consider the consequences it naturally leads to.

If labour be, as Ricardo and other writers maintain, the cause of all value; if a man plants an acorn, the full-grown oak tree

should be of no more value than the acorn, because human labour stops there ; the rest is the agency of Nature.

According to this doctrine, cattle and fowls ought to have no value at all, because no human labour ever made an animal nor ever laid an egg.

According to Ricardo's doctrine, the value of the harvest reaped should be no greater than the cost of the seed corn, the ploughing and labouring the ground, and the manure placed in the soil, because human labour stops there ; the rest is the agency of nature.

According to Ricardo, the fertilizing showers and the warmth of the sun add nothing to the value of the crops ; therefore, by the same doctrine, the want of a due amount of rain, or an absolute drought, or excessive deluges of rain, and the total absence of sunshine, would cause no diminution in the value of the crops !

We suspect that practical farmers would scarcely agree with this doctrine, and think that it must be a queer science which teaches it.

It is a common observation that a day of fine sunshine in summer in certain stages of the crops is worth a million of money to the country.

The doctrine of Smith and Ricardo, that the Value of a commodity is the Quantity of Labour embodied in it, gave rise to the mischievous and absurd expressions, Intrinsic Value and a Standard of Value, which, considering that Value is a ratio, are impossible.

Having thus shown Ricardo's self-contradiction and confusion on the definition and nature of Value, we have now to examine his doctrine on the Laws of Value.

As shown above, he excludes Labour and Rights, and also all material commodities which are not the result of human labour from his consideration of the Law of Value ; that is, he excludes about 80 per cent. of valuable commodities from his Law of Value, which is contrary to the fundamental laws of Natural Philosophy, and therefore seals its condemnation.

Commodities which are the result of human labour, he divides into three classes—

1. Those which are limited, and cannot be increased by human labour.

He says that the value of these is governed solely by the Law of Supply and Demand.

2. Those which can be increased indefinitely by the expenditure of equal amounts of money.

The Value of these, he says, is determined exclusively by their Cost of Production.

3. Those which can be increased indefinitely, but only by a constantly increasing expense.

The Value of the total quantity produced, he says, is governed by the last quantity produced at the greatest cost.

Such a mode of determining the Laws of Value is contrary to the fundamental principles of Natural Philosophy, because Economics being a science of Variable Quantities, there can be only one general Theory of Value.

But on this subject he has plunged into innumerable self-contradictions. For in Chap. i. Sect. i. he says, "The Value of commodity, or the quantity of any other commodity for which it will exchange, depends on the relative *Quantity of Labour* which is necessary for its production, and *not on the greater or less compensation which is paid for that Labour*"; for he justly observes that the same quantity of labour may be paid at different rates at different times. Therefore, in this place, he expressly says that it is not Cost of Production that regulates Value, but only Quantity of Labour (Cost of Production).

But when he comes to Chap. xxx., he has quite lost sight of the distinction he drew between Quantity of Labour and Cost of Production, and treats them as identical. He says, "It is the Cost of Production which must ultimately regulate the price of commodities, and not, as has often been said, the proportion between the Supply and Demand. . . ."

"The opinion that the price of commodities depends solely on the proportion of Supply to Demand, or Demand to Supply, has been almost an axiom in Political Economy, and has been the cause of much error in that science. . . . Its natural price is the money Cost of Production."

Then, after quoting Lord Lauderdale's Law of Value (Value), he says, "This is true of monopolised commodities, and, indeed, of the market price of all other commodities for a limited period."

Now, this is a flat violation of the *Law of Continuity*, which says, "*A Quantity cannot pass from one amount to another by any change of conditions without passing through all the intermediate magnitudes according to the intermediate conditions.*"

Now, as every Economist admits that when prices are very high they are governed by the Law of Supply and Demand, and when

they are very low that they are also governed by the same Law of Supply and Demand, it follows that they must be governed by the same general Law at all intermediate points. Thus Cost of Production never directly governs price ; it is only in one class of cases that it does so indirectly through the action of the Law of Supply and Demand, as we have shown under Cost of Production.

But the Theory of Ricardo's which acquired the greatest notoriety is his Theory of Rent, which comes under his third class of commodities. We cannot investigate that theory here, as we have fully discussed it under **Rent**. Shortly stated, it is that the cost of raising the last quantity of corn produced, regulates the value of the whole. Loose writers allege that Anderson discovered this theory before Ricardo. But this is absolutely incorrect. Anderson, who was a practical farmer, maintains exactly the contrary. He says that it is the price of corn which indicates the expense which can be afforded for raising the last quantity produced ; and even one who has the least knowledge of agricultural affairs can see at once that Anderson is right.

No doubt, Ricardo's theory proves the point he wishes to establish, that the payment of Rent does not raise the price of corn. But a theory is not necessarily true, because it leads to a right result. Many times truth has been built on erroneous theories. Anderson's theory, which is the direct reverse of Ricardo's, leads to exactly the same results. Under Rent, we have shown the absurd consequences of Ricardo's theory.

Moreover, Ricardo contradicts himself ; for though in one place he maintains that the payment of Rent does not raise the price of corn, in other places he alleges that it does. So that there is exactly the same contradiction in Ricardo as there is in Smith.

Moreover, Ricardo alleges that Tithes are a tax on the consumer. This shows Ricardo's want of scientific instinct, because Tithes stand on exactly the same footing as Rent. The reason why neither Tithes nor Rent increase the price of corn is that they are not part of the Cost of Production, but a share of the profit, and neither of them affects the Supply nor the Demand for corn, as we have shown under Rent.

Thus the whole structure of Ricardo's work is laid in ruin because it is contrary to facts, to experience, and to the fundamental laws of Natural Philosophy.

WHATELY.

The last writer I think necessary to cite here is Whately, Professor of Political Economy at Oxford in 1832. He began his lectures by finding fault with the name of Political Economy as being a new term most unfortunately chosen, which, he says, almost implies a contradiction. According to etymology, the branches of science called πολιτική and οικονομική, seem naturally to have reference respectively to πόλις and οἶκος, one treating of the affairs and regulation of a commonwealth, the other of a private family. This shews that Oxford scholarship in those days—or at least Whately's—left something to be desired. Because in Greek οἶκος does not mean only a private family or a house, but as we have shewn further on, it is the technical term for Property of all descriptions and natures. He justly says that to persons who are habituated to this employment of terms, the title of Political Economy is likely to suggest very confused and indistinct, and, in a great degree, incorrect notions.

He says—"A. Smith, indeed, has designated his work a treatise on the 'Wealth of Nations,' but this supplies a name only for the *subject matter*, not for the *science* itself. The name I should have preferred as the most descriptive, and, on the whole, least objectionable, is that of Catallactics, or the 'Science of Exchanges.'

"Man might be defined 'An animal that makes *Exchanges*'; no other, even of those animals which in other points make the nearest approach to rationality, having, to all appearances, the least notion of bartering, or in any way exchanging one thing for another. And it is in this point of view alone that Man is contemplated by Political Economy. This view does not essentially differ from that of A. Smith, since in this science the term Wealth is limited to *exchangeable* commodities, and it treats of them so far forth only as they are, or are designed to be, the subjects of exchange. But for this very reason it is, perhaps, the more convenient to describe Political Economy as the science of Exchanges, rather than as the science of National Wealth. For, the *things* themselves, of which the science treats, are immediately removed from its province, if we remove the possibility, or the intention, of making them the subject of exchange, and this, though they may conduce in the highest degree to happiness, which is the ultimate object, for the sake of which wealth is sought. A man, for instance, on a desert island, like Alex. Selkirk, or the personage his adventures are supposed to

have suggested, Robinson Crusoe, is in a situation of which Political Economy takes no cognizance; though he might figuratively be called rich, if abundantly provided with food, raiment, and various comforts; and though he might have many commodities at hand, which would become exchangeable, and would constitute him, strictly speaking, rich, as soon as fresh settlers should arrive.

“In like manner, a musical talent, which is wealth to a professional performer who makes the exercise of it a subject of exchange, is not so to one of superior rank, who could not without degradation so employ it. It is in this last case, therefore, though a source of enjoyment, out of the province of Political Economy.

“This limitation of the term Wealth to things contemplated as exchangeable, has been objected to on the ground that it makes the same thing to be wealth to one person and not to another. This very circumstance has always appeared to me the chief recommendation of such a use of the term, since the same thing is different to different persons. Even if we determine to employ the terms Wealth and Value in reference to every kind of possession, we must still admit that there is at least *some* very great distinction between the possession, for instance, of a collection of ornamental trees by a nurseryman, who cultivates them for sale, and by a gentleman who has planted them to adorn his grounds.

“Since, however, the popular use of the term Wealth is not always very precise, and since it may require, just in the outset, some degree of attention to avoid being confused by contemplating the very same thing as being, or not being, an article of wealth, according to circumstances, I think it for this reason more convenient, on the whole, to describe Political Economy, as concerned universally and exclusively about *exchanges*.”

Whately then goes on to speak of cases in which nothing visible is transferred, but only a Right; but he says that in such cases these are, in reality, exchanges, just as where material commodities are exchanged, which evinces the impropriety of limiting the term Wealth to *material* objects.

Thus Whately agrees exactly with the unanimous doctrine of the ancients that **exchangeability** is the sole essence and principle of Wealth. That all things are Wealth only when and where they are exchangeable, that when and where they are not exchangeable they are not Wealth. This also agrees with the doctrine of the Economists, that things, however useful and agreeable they may be, are only technically to be termed Wealth when they are made the subjects of exchange. But while the Economists restricted the

term only to *material* things when they are exchanged and excluded Labour and Credit, Whately includes all the three orders of Exchangeable Quantities under the term Wealth. These are the fundamental concepts which we adopt.

Thus the result is that the technical meaning of Wealth, in Economics, is simply anything whatever which is bought and sold or exchanged.

Whately then (Lect. ix.) complains of the total want of clear and precise definitions in Economics, and censures those who avow their dislike of accurate and precise language on this subject, and object to the pedantic practice of defining terms, like Jones, many of them probably speak thus from really knowing no better—from having a superficial and ill-cultivated mind.

"Definitions, then (such, I mean, as shall serve to preclude ambiguity), are most wanted in those very cases where (as in Political Economy) both the reader and the writer are the most apt not to perceive the want, from the terms being such as are in common use. And there is this additional difficulty, that here it is necessary to define and use each term in some sense corresponding as nearly as possible to common use—agreeably to some *one*, and, if possible, the most usual of the several popular meanings."

He then warns against using the same word in different senses in different places, and gives several instances of such.

"Let the student then consider correctness of the reasoning process, and, with a view to this, a clear definition of technical terms, and careful adherence to the sense defined, as the first—the most important—and the most difficult, in the science of Political Economy."

Whately then makes some most important observations—"It may be worth observing that in examining, framing, or altering definitions in Political Economy, you will find in most persons a tendency to introduce *accidental* along with or instead of *essential* circumstances. I mean that the notion they attach to each term, and the explanation they would give of it, shall embrace some circumstances *generally*, *but not always*, connected with the thing they are speaking of, and which might accordingly (by the strict account of an accident) be 'absent or present, the essential character of the subject remaining the same.' A definition framed from such circumstances, though of course incorrect, and likely at some time or other to mislead us, will not unfrequently obtain reception, from its answering the purpose of a correct one, at a particular time and place. . . .

“A specimen of that introduction of accidental circumstances which I have been describing, may be found, I think, in the language of a great number of writers respecting Wealth and Value; who have usually made *Labour* an essential ingredient in their definitions. Now it is true, *it so happens*, by the appointment of Providence, that valuable articles are, in *almost* all instances, obtained by Labour; but still, this is an accidental, not an essential circumstance. If the aerolites which occasionally fall were diamonds and pearls, and if these articles could be obtained in no other way, but were casually picked up to the same amount as is now obtained by digging and diving, they would be of precisely the same value as now. In this, as in many other points in Political Economy, men are prone to confound *cause* and *effect*. *It is not that pearls fetch a high price because men have dived for them; but on the contrary, men dive for them because they fetch a high price.*”

Thus Whately has sent a deadly shaft into the whole Economics of Smith and Ricardo. Smith begins his work by describing Wealth as the produce of “land and labour”; thus making materiality and labour as the *essence* of Wealth; and he entirely omits Exchangeability. Now, as a matter of fact, not twenty per cent. of Economic or Exchangeable quantities have any labour associated with them at all, and not five per cent. of Economic quantities have materiality and labour associated with them, which shows that materiality and labour are only the accidents of Wealth and Value. It is Exchangeability, which is the sole essence of Wealth, as the ancients unanimously held. The Economists also held that Exchangeability is the real essence of Wealth; but they clogged it also with materiality, which is entirely inadmissible.

Whately then said that pearls do not fetch a high price because men dive for them, but men dive for them because men give a high price for them; that is, it is not Labour which is the *cause* of Value, but Value which is the inducement to Labour; just as Condillac said before him; and this is the entire bouversement of the Economics of Smith and Ricardo.

Whately thus laid the foundation of that system of Economics which I have adopted and developed.

The Economics of Jean Baptiste Say and John Stuart Mill.

JEAN BAPTISTE SAY.

We have shewn in the series of writers we have cited that the universal idea of Economics was that it is the Science of Commerce, or Exchanges, or the Theory of Value, and though it was in a very imperfect, confused, and contradictory state, yet if that concept had been steadfastly adhered to, and worked out in all its extent, and subjected to the same critical inquiry and elaboration as all the other Physical Sciences had been treated with, all these blemishes might have been removed, and Economics might have been raised to the rank of a definite and positive science, of the same rank as the Physical Sciences.

But unfortunately a very distinguished French writer threw it into utter confusion, and ruined it as the Science of Exchanges, or the Theory of Value.

We have shown that while the Economists declared that Economics is the Science of Exchanges, or of Commerce, they most unfortunately devised an alternative definition of it as the "Production, Distribution, and Consumption of Wealth," by which, however, they explained that they meant the Commerce, or the Exchanges of the material products of the earth, and of those only.

In 1803 Jean Baptiste Say published his first work, "*Traité d'Economie Politique: ou simple exposition de la manière dont se forment se distribuent et se consomment les richesses.*" In this he was the first to confine the name of Political Economy to the Production, Distribution, and Consumption of Wealth. "Politics properly so called, the science of the organization of societies, has long been confounded with Political Economy, which teaches how the riches which satisfy the wants of society are formed, distributed, and consumed. Yet wealth is essentially independent of political organisation. A state may prosper under all forms of government, if it is well administered." He complains justly that previous writers had thrown the subject into confusion by mixing up questions of Government with questions of Wealth.

Say, then, enters into a highly philosophical dissertation on the nature and method of investigation proper to Economics. He says that men have made systems before establishing truths. He condemns severely the dogmatic and *à priori* method which had been followed by the school of Quesnay and Ricardo, who adopt a method of arguing which would not be allowed in any other

science of experiment, which resembled that of the scholastics of the middle ages, who discussed words and not facts, which proved everything except the truth. By following this method Ricardo arrived at results which are contradicted by experience. This was followed by interminable controversies, often scarcely intelligible, which had the unfortunate effect of making men of the world, ignorant of the solid bases upon which Economics is built, think that they had again fallen under the empire of systems and private opinions which agreed in nothing.

He says that the writings of the ancients shewed that they had no just ideas on the nature of Wealth. But in this Say is entirely mistaken, because the ancients unanimously held that Exchangeability is the sole essence and principle of Wealth, an idea which is only just now beginning to be generally recognised by Economists at the present day.

Say then observes that the Economists deserved general esteem because their writings favoured the most severe morality, and the freedom which every one ought to have to dispose of his person at will, of his talents and his possessions—freedom without which individual and public prosperity were words void of sense. It was for this reason that nearly all French writers of repute, and those who studied matters analogous to Economics since 1760, were dominated by their ideas. Among them Condillac might be included, although he tried to make a system of his own, on a subject which he did not understand. There were, however, some good ideas amid the ingenious chatter of his book. This judgment of Say's on Condillac is most unfortunate, because Condillac understood the nature of Economics far better than Say himself did; and his system, which is that of Commerce or Exchanges, according to the prevalent idea of the age, has now superseded that of Say among all the most advanced Economists of the present day. It must be admitted, however, that it is too much an abstract assertion of principles without a sufficient exposition of the facts of commerce. He admits, however, that the Italian Economists, Beccaria, Verri, Filangieri, and others, excelled the French Economists.

Say then recognises the importance of Adam Smith's work, and allows it great merit in some respects. But he condemns the confusion and total want of method which pervades it, and points out numerous deficiencies.

Say emphatically asserts that Economics is essentially an Inductive Science, and to be constructed in exactly the same manner that all the Physical Sciences have been done. He says that some

persons believe that only the Physical Sciences are capable of being reduced to certainty, and that there are no constant facts and undoubted truths in moral and political sciences; and, therefore, that they are not true sciences, but only a body of hypothetical opinions, more or less ingenious, but purely individual. These persons found their opinion upon the fact that the writers on it differ from each other, and some of them taught veritable extravagances.

But it has been the same in every other science—chemistry, physics, botany, mineralogy, physiology. Leibniz and Newton, Linnæus and Jussieu, Priestley and Lavoisier, de Saussure and Dolomieu, had not been able to agree, but for all that did not these sciences exist?

We have now, then, to see how Say realised his own ideas.

System of J. B. Say.

Unfortunately Say rejected the concept that Economics is the Science of Commerce, or Exchanges, or the Theory of Value, and he adopted the alternative definition of the Economists, that it is the Science of the Production, Distribution, and Consumption of Wealth, but he completely changed the meaning of these terms as used by the Economists. While the Economists used that expression as one and indivisible, Say broke it up into its component terms, and divided his treatise into three parts—(1) the Production of Wealth, (2) the Distribution of Wealth, (3) the Consumption of Wealth.

The *Traité* is defective, because it begins by giving no definition of the term Wealth, which is the basis of the whole science, but in his *Cours complet d'Economie Politique*, which is a very greatly extended and developed edition of his *Traité*, he begins by discussing the nature of Wealth.

He says—"The exclusive possession which, among a community of men, distinguishes the property of one man from others, is what is termed Wealth." And, among other things, he designates as Wealth, Rights of Action, Credits or Debts, and the Funds: he also adds a workman's labour, the skill of a physician, a theatrical performance, the *clientelle* of an advocate, the custom of a shop, the copyright of a book, and many other things of a similar nature, which he designates as Immaterial Wealth. But Say's definition is defective, because he enumerates all a man's possessions as Wealth, and he omits the fundamental property of Exchangeability. The Economists confined the term Wealth to a man's possessions which

are *Exchangeable*. If a man has possessions which he cannot exchange away, how are they any more Wealth to him than so many pebbles from the brook?

It is true he does afterwards recognise Exchangeability as necessary to Value, but that unfortunately creates a confusion between his fundamental concepts.

He then inquires into the origin of Value, and entirely repudiates the doctrine of Smith and Ricardo, that Labour is the cause of Value. He alleges that Value can only reside in the thing itself, and, according to him, all Value is founded on **Utility**. But this is only one degree less erroneous than the idea that Labour is the cause of Value. We have shewn, under **Value**, how erroneous it is to say that Labour is the cause of Value, because if that were true, an isolated or single object could have Value, which is utterly impossible: because Value is a term of relation, and there can be no Value unless there are, at least, two objects. Moreover, if an object were once created by any amount of Labour, it could never change its Value, which is contrary to all experience.

Utility is one degree less erroneous than Labour as the cause of Value, because if a thing is useful, it must be useful to some person.

But, then, if Utility is the cause of Value, things must be valuable in proportion to their Utility, which, as we have shewn under **Value**, is utterly contrary to experience.

Thus—

1. A horn spoon or a glass tumbler is quite as useful as a solid gold spoon or a solid gold tumbler, but have they the same Value?

2. A lindsey woolsey, or a serge dress, is quite as useful as one of Genoa velvet or brocaded silk, but would they have the same Value in the eyes of ladies?

3. A steel watchguard is quite as useful as one of solid gold, but has it the same value?

4. If the works of two watches were of exactly equal quality, and if one were enclosed in a silver case, and the other in a case of solid gold studded with diamonds and rubies, they would be equally useful, but would they have the same Value?

And similar instances might be multiplied to infinity.

Say calls the Utility of a thing its Intrinsic Value.

But in other places he says that Value is a Moral Quality. And how can a moral quality be an attribute of a material object, or an abstract Right?

It was this doctrine which the Economists earnestly warned their readers against. They constantly inculcated that Economics ha

nothing to do with Value in use, but only with Value in Exchange. Thus the whole basis of Say's system is shown to be erroneous, and the whole structure falls in ruin.

We have said that Say adopted the alternative definition of the Economists, and styled Economics the science of the "Production, Distribution, and Consumption of Wealth." But that he completely changed the meaning of these terms.

By *Production* the Economists meant bringing a material object into commerce, and offering it for sale, in strict conformity with the meaning of the Latin *producere* (**Production**).

Littre says, *Produire: pousser en avant. Faire voir, mettre sous les yeux*; and he gives several applications of this idea. But he gives no instance whatever of the word being used as creating or adding utility to an object.

And he defines *Production* as *action de produire, de mettre en avant*.

But Say says, "One cannot create objects: the mass of matter of which the world is composed cannot be increased nor diminished. All that we can do is to reproduce these matters under another form, which makes them fit for some use they had not before, or which augments the utility which they already had. Thus there is the creation, not of matter, but of Utility; and since this utility gives them Value, there is the *production of Wealth*."

It is thus we must understand the word production in Economics, and through the whole course of this work. Production is not the creation of matter, but the creation of utility.

And in the definitions at the end of the *Traité* he says:

"*Production: produire*—to produce is to give anything a recognized Value, able to procure by exchange something else of equal value; it is also to augment the recognized value which anything ready has."

He also says that everything which is Produced is Consumed. Now far this is true we shall have to inquire shortly.

Now there is no warrant in any language for such a meaning of the word Production. It is a pure perversion of ideas, quite peculiar to Say, and totally inadmissible.

Say's second book is on the Distribution of Wealth. Now by Distribution the Economists meant the intermediate sales or exchanges an object undergoes between the person who first *produces*, brings it into the market and offers it for sale, and the final purchaser or consumer who buys it for personal use and enjoyment,

and takes it out of the market. Thus the Economists treated only of distribution by exchange. Say does not differ from this materially, for he says :

“Distribution (of created values or of the value of products). It operates by the purchase by a manager of industry, of the productive services of his co-producers, or of a product which has not yet received the final form which it ought to receive. This purchase is an advance which the last undertaker, who is usually a retail dealer, is repaid by the consumer.”

Say has also quite perverted the meaning of the word *Consummation* or Consumption. The word *Consummation* was used by all French Economical writers previous to Say to mean simply purchase, or Demand. It means *completion*, from *consommer*, which comes from the Latin *consummare*, to complete or accomplish. The *Producteur* was the person who brought any object into commerce and offered it for sale ; the *Consommateur* was the person who bought it for use and enjoyment, and took it out of commerce (**Consumption**).

So also Adam Smith uses Consumer as equivalent to Purchaser. In the ordinary language of commerce the Producer is the person who offers any article for sale, the Consumer is the person who purchases it. So Burke says, “The meeting of Producer and Consumer makes market.” So Smith says, “Consumption is the sole end and purpose of all Production,” which is merely saying that things are offered for sale for the purpose of being sold. By the word Consumption, as used by all these writers, there never was any idea of destruction involved.

Say says : “The reader must understand that as Production is not the creation of a matter, but the creation of Utility, so Consumption is not the destruction of Matter, but the *destruction of utility*. The utility of a thing once destroyed, the first foundation of its value, which made it sought for, which establishes the demand for it, is destroyed. Thenceforth it has no value, it is not a portion of wealth.

“Hence to consume (*consommer*), to *destroy the value of thing*, to annihilate the value of things, are expressions whose meaning is absolutely the same, and corresponds to that of the word *produce*, give utility, create value, whose meaning is also the same.

“All Consumption being the destruction of value is not measured by the volume, the number, or the weight of the products consumed but by their value.”

Also he says in the epitome at the end of the *Traité* :

"*Consommateur*: is he who destroys the value of a product, either to produce another, or to satisfy his tastes or wants.

"*Consommation*: *Consommer*: to consume (*consommer*) is to destroy the value of a thing, or a portion of its value, by destroying the utility which it had, or a portion of that utility.

"We cannot consume (*consommer*) that which cannot be destroyed. Thus we can consume the service of an industry, and not the industrial faculty which has rendered this service: the service of land, but not the land itself.

"A value cannot be consumed twice: for to say that a thing is consumed is to say that it does not exist any more.

"Everything which is produced is consumed: therefore every value created is destroyed, and was only created to be destroyed."

Again he says: "The most immediate effect of every kind of consumption (*consommation*) is the loss of value, and therefore of wealth, which follows for the possessor of the product consumed (*consommé*). This effect is constant, inevitable, and we must never lose sight of it in reasoning on these matters. A product consumed (*consommé*) is a value lost for all the world and for ever."

And this meaning of consumption as destruction was adopted by other writers. Thus Malthus says, "Consumption, the destruction wholly or in part of any portions of Wealth," and "Consumption is the great purpose and end of all production."

So McCulloch says: "By consumption is meant the annihilation of these qualities which render commodities useful, or desirable. To consume the products of arts or industry is to deprive the matter of which they consist of utility, and consequently of the exchangeable value communicated to it by labour. Consumption is, in fact, the end and object of human exertion: and when a commodity is in a fit state to be used, if its consumption be deferred, a loss is incurred."

These sentences are a flagrant example of the thoughtless way in which Economical writers dump down doctrines in their works without the least reflection as to their consistency with facts and reality. It is astonishing that men of ability should maintain such a nonstrous paradox as that everything which is produced is destroyed: that it is only produced for the purpose of being destroyed; and that if it is not destroyed a loss is incurred.

If Consumption is used in its proper sense it is true that Consumption is the object of all Production. Because, as said above, Production only means offering for sale, and things are offered for sale for the purpose of being sold. But are all things

produced destroyed? Are all things produced for the purpose of being destroyed? And is a loss incurred if they are not destroyed as soon as produced?

A young man purchases a gold ring, enriched with diamonds and rubies, for his lady-love. The jeweller is the producer, and the young man is the consumer. Does he buy the ring for the purpose of destroying it? Is there any necessity for its ever being destroyed? It may last to the end of time. Is a loss incurred if it is not destroyed as soon as it is bought?

Men search for precious stones, diamonds, emeralds, rubies, etc., in the mines. They offer them for sale; they are the Producers. Other persons purchase them, *i.e.* consume them. Are the diamonds, emeralds, and rubies, destroyed as soon as they are purchased? Were they sought for for the purpose of being destroyed? And is a loss incurred if they are not destroyed?

And innumerable other examples will occur to any reader.

Say himself gives an example, showing the absurdity of his own doctrine: "The English succeed in making very fine glass for mirrors, and could supply them at a very moderate price, if the enormous duties laid on the manufacture of glass in England did not raise the product to a price which many consumers (*consommateurs*) cannot afford." "The consumers (*consommateurs*) of products are their buyers."

Now, did the consumers of the mirrors, *i.e.* their purchasers, smash them? Did they buy them for the purpose of smashing them? And was loss incurred if they were not smashed as soon as they were bought?

It is such fatuous doctrines as these which led a good many persons to say with only too much truth, that Economics is only a mass of clotted nonsense.

The fact is that Production and Consumption mean simply Supply and Demand, and together constitute Exchange or Commerce.

By breaking up Economics into three separate departments under the terms Production, Distribution, and Consumption, Say has completely ruined Economics as the Science of Commerce or Exchanges, and broken the back of the Theory of Value. How is it possible to discuss the Theory of Value under the expression, Production, Distribution, and Consumption of Wealth?

Say perfectly acknowledges that Labour is an Economic Quantity, and is bought and sold, and, like Adam Smith, has many interesting discussions on Wages or the price of Labour. Labour is bought

and sold, and its value is determined by the general Law of Value. But what sense is there in speaking of the Production, Distribution, and Consumption of Labour?

Again. Say acknowledges that Rights of Action, Credits and Debts, and the Funds, are Wealth. They are bought and sold or exchanged. He also acknowledges that a vast variety of other abstract Rights are Wealth. But how is it possible to speak of the Production, Distribution, and Consumption, of Bank Notes, Bills of Exchange, and the Funds? The copyright of a book or a drama or a song is a saleable commodity. It may be bought and sold. But how are we to speak of the Production, Distribution, and Consumption of Copyrights?

Say acknowledges that the practice of a professional man and the custom of a shop are saleable commodities, and may be bought and sold. But how are we to speak of the Production, Distribution, and Consumption of the practice of a profession or the custom of a shop? And so on of a vast variety of other rights.

The fact is that Say quite overlooked the fact that when the Economists devised the term, the Production, Distribution, and Consumption of Wealth, they expressly restricted it to *material* products, and so defined the terms as to mean the commerce or exchanges of the material products of the earth, and of these only.

But when Labour and Rights are introduced into Economics, it becomes simply unintelligible jargon. With such a concept it is impossible to give an exposition of the principles and mechanism of the great system of Mercantile Credit, the colossal business of Banking, and the Foreign Exchanges, which all come naturally under the concept of Economics as the sciences of commerce or exchanges, because all these operations are commerce or exchanges, and come under the Theory of Value.

One of the subjects on which Say's doctrine is the most notorious is his confusion on credit. He begins by recognizing that Rights of Action, Credits or Debts, are Wealth, and in a multitude of places he speaks of them as being capable of being employed as Capital, as well as any other commodities; and he says that if a Bank can keep in circulation a greater amount of credit than the quantity of specie it holds in reserve, that is an augmentation of capital, and he inquires who gets the benefit of this new Capital. And yet this very same Say says elsewhere that to assert that Credit is Capital is to maintain that the same thing can be in two places at once! And multitudes of writers have repeated this silly sarcasm. Whence then is the origin of this flagrant contradiction? It is simply that in these two

places Say has contradictory notions of the fundamental concept of Credit. In one set of passages he treats Credit as the present right to a future payment, and then he allows that this may be bought and sold and employed as Capital. In the other passages he considers the Credit to be the goods "lent"—*i.e.* sold; and then he asks, How can the same goods be in two places at once, and serve two people at the same time?

We have fully exhibited Say's amazing confusion and self-contradictions under **Credit**.

There are, no doubt, multitudes of philosophical observations and acute remarks throughout the whole of Say's work, which deserve attention; but, as a whole, as a general treatise on the Science of Economics, it is a chaos of confusion and contradictions, and utterly impossible.

JOHN STUART MILL.

John Stuart Mill was the friend and disciple of Jean Baptiste Say, and having already published a small volume of *Essays on some Unsettled Questions in Political Economy*, published in 1848 his *Principles of Political Economy*, which was immediately received with unbounded applause as the *ne plus ultra* of Economics. One writer in the *Edinburgh Review* went so far as to style it a *κτῆμα ἐς αἰεί*.

Now of all the persons who lavished such unbounded applause on this work there was not a single one who had the faintest knowledge of Mercantile Law, nor of practical business, nor of the method of applying the principles of Natural Philosophy to the phenomena of Economics.

Mill was a disciple of Say in so far as this, that he in agreement with Say deliberately rejected the fundamental concept of Economics as being the Science of Commerce, or Exchanges, or the Theory of Value.

He says,¹ "The subject upon which we are now about to enter [Exchange] fills so important and conspicuous a position in Political Economy, that in the apprehension of some thinkers its boundaries confound themselves with those of the science itself. One eminent writer [Whately] has proposed as a name for Political Economy, "Catallactics," or the Science of Exchanges, by others [McCulloch] it has been called the Science of Values. If these denominations

¹ *Princ. of Pol. Econ.* bk. iii. chap. i.

had appeared to me *logically* correct, I must have placed the discussion of the elementary laws of value at the commencement of our enquiry instead of postponing it to the third part; and the possibility of so long deferring it is alone a sufficient proof that this view of the nature of Political Economy is too confined. It is true that in the preceding Books we have not escaped the necessity of anticipating *some small portion of the* theory of Value, especially as to the Value of labour and land. It is nevertheless evident that of the two great departments of Political Economy, the production of wealth and its distribution, the consideration of Value has to do with the latter alone [the Economists unanimously declared that production and distribution constitute Exchange, or Value]; and with that only so far as competition, and not usage or custom, is the distributing agency."

Now let us ask what there is contrary to the laws of Logic in saying that the phenomena of Commerce, or Exchanges, form a distinct and positive science, all based on a single general fundamental concept, and as capable of being erected into a definite and positive science exactly in the same way as the phenomena of Force, Light, or Heat, or any other physical science? And what is there contrary to the laws of Logic in giving a distinct name to this science, such as Political Economy, Economics, Catallactics, or any other? This was the universal opinion before J. B. Say, and in ignoring this, Mill showed that he was ignorant of the history of Economics.

Mill says that he has not escaped the necessity of anticipating some small portion of the theory of Value before he comes to Exchange. But in the books preceding Exchange he discusses Wages, Profits, and Rent, and these are not a very small portion of the theory of Value, as Mill says, but a very large portion of it; indeed, some writers seem to consider that they constitute the whole theory of Value.

Mill then says—"In a state of society, however, in which the industrial system is entirely founded on purchase and sale, each individual for the most part living not on things in the production of which he himself bears a part, but of things obtained by a double exchange, a sale followed by a purchase—the question of Value is fundamental. Almost every speculation respecting the economical interests of society thus constituted implies some theory of Value; the smallest error on that subject infects with corresponding error all our other conclusions; and anything vague or misty in our conception of it creates confusion and uncertainty in everything else."

Here Mill has completely cut the ground from under his own feet, as he has done in almost every other case. Because the very purpose of Economics is to consider a state of society in which the industrial system is entirely founded on purchase and sale, in which each individual for the most part lives not on the things which he himself produces, but on things obtained by a double exchange, therefore by Mill's own showing Economics is nothing but the Theory of Value.

We have now shown enough to shake the confidence of any intelligent and impartial reader in the infallibility of Mill, because his own admission condemns the whole of his own system of Economics. But we have now to exhibit something more startling still if that be possible.

In Book I., chap. i., we have shown Mill's astounding self-contradiction as to the proper method of Investigation in Economics. We have shown that in eloquent passages in his Logic he maintains that Economics is an Inductive Science, and that the backward state of the Moral Sciences can only be remedied by applying to them the methods of Physical Science duly extended and generalised. That the only hope of reducing such studies into a science is by the employment of stricter rules of Induction than are commonly recognised, and consciously and deliberately applied to these more difficult inquiries. Brave and eloquent words indeed! And now we have to see how far Mill has followed the course marked out by himself.

In his *Essays upon some unsettled questions of Political Economy*, he strenuously maintains that Economics is an *à priori* science, that it reasons, and must necessarily reason, *from assumptions and not from facts!* That any Economist who denies this places himself in the wrong! That this is its character as understood and taught by all its most distinguished teachers! And that the *à priori* method is not only a legitimate mode of philosophical investigation in Economics, *but it is the only one!*

Now here Mill is in flat rebellion against his master Say, and in flat contradiction to himself.

An *à priori* science is a science which a man can concoct out of his own brains, or evolve out of his own inner consciousness, sitting at his desk without any reference to external nature, or to facts, as Mill himself says—such as Geometry, Trigonometry, Conic Sections, the Differential Calculus, or any other purely mathematical science.

Now, if a man were to set himself down at his desk and write a large volume on the Geology of Australia, or any other country,

without having the slightest knowledge of the science of Geology, and never having been in any of these countries—or if he should write a large work on surgery out of his own imagination, without having the least knowledge of surgery—or upon medicine without the least knowledge of the medicinal effect of drugs—or on the phenomena of force—or light—or heat—or electricity, or any other subject requiring an exhaustive knowledge and study of facts—in what terms should we characterise such works?—in terms, I fear, which would be scarcely parliamentary.

Now the first necessity of an Economist is to have a thorough knowledge of the most abstruse and subtle department of mercantile law, then to have a thorough knowledge of practical business, and then to have an adequate knowledge of physical science, and of the methods by which the various physical sciences have been constructed, so as to bring the phenomena of commerce under the dominion of the laws of physical science.

Now Mill knew absolutely nothing of mercantile law—he never had the least knowledge of practical business—and as the late Professor Adams said to me one day at Cambridge, he knew nothing of physical science; and yet he writes a large work on a subject in which these various departments of knowledge are requisite. Every page of his work is full of the most glaring ignorance and blunders; and there is scarcely a single point in which he does not contradict himself. Now, in sober seriousness, we must ask how is this more consistent with scientific morality than cheating at cards, or forgery, or issuing base coin.

We have already given specimens of his self-contradictions on the nature of the science itself, and of the method of investigation proper to it. We shall now investigate his doctrines on Wealth and Value, which are the two fundamental concepts of the science.

Mill divides his work into (1) Production; (2) Distribution, and (3) Exchange. Now Production and Distribution, in the language of the Economists, meant Exchange; therefore Mill's work is simply on Exchange and Exchange. He rightly considers that Consumption, in Say's sense of destruction, forms no part of Economics.

The first grave and fundamental defect of Mill's work is, that he rushes into Production without first clearly and finally determining the meaning of Wealth, which is the basis of the whole science.

He begins by saying truly enough (*Preliminary Remarks*) that the subject of Economics is Wealth. But then he says—"Everyone has a notion, sufficiently correct for common purposes, of what is meant by Wealth. . . . It is no part of the design of this treatise

to aim at metaphysical nicety of definition, where the ideas suggested by a term are already as determinate as practical purposes require."

Such doctrines as these strike us with amazement in a professed writer on Logic. Are not the whole physical sciences based on the strictest nicety in the definition of fundamental concepts? Have there not been the fiercest controversies to determine their meaning? And it is only by means of these controversies that they have been raised to their present position.

Mill himself says—"Since reasoning or inference, the principal subject of Logic, is an operation which usually takes place by means of words, and in complicated cases can take place in no other way: those who have not a thorough insight into the signification and purposes of words will be under chances amounting almost to a certainty of reasoning or inferring incorrectly. And logicians have generally felt that unless in the very first stage they removed this fertile source of error, unless they taught their pupil to put away the glasses which distort the object, and to use those which are adapted to his purpose in such a manner as to assist, not perplex his vision, he would not be in a condition to practise the remaining part of their discipline with any prospect of advantage. Therefore it is that an inquiry into language, so far as it is needful to guard against the errors to which it gives rise, has at all times been deemed a necessary preliminary to the study of logic.

"But there is another reason of a still more fundamental nature why the import of words should be the earliest subject of a logician's consideration, because without it he *cannot examine into the import of propositions.*"

So again—"But to penetrate to the more hidden agreement on which these obvious and superficial agreements depend is often one of the most difficult of scientific problems. As it is among the most difficult, so it seldom fails to be among the most important. And since upon the result of this inquiry respecting the causes of the properties of a class of things, there incidentally depends the question—What shall be the meaning of a word? Some of the most profound and most valuable investigations which philosophy presents to us have been introduced by, and have offered themselves under the guise of, inquiries into the definition of a name."

Out of numerous other passages to the same purpose, we may cite one more—"And the student of logic, in the discussion even of such truths as we have cited above, acquires habits of circumspect interpretations of words, and of exactly measuring the length

and breadth of his assertions, which are among the most indispensable conditions of any considerable mental attainment, and which it is one of the primary objects of logical discipline to cultivate."

Mill on Wealth.

We shall now see whether Mill has observed his admirable precepts with regard to the formation of Definitions, any better than he has his admirable precepts about the construction of Economics as a science, and whether he himself has any definite notion of the meaning of Wealth.

In his *Preliminary Remarks*, he says—"Everything forms, therefore, a part of Wealth which has a power of purchasing." Now here we have a perfectly clear and definite concept of Wealth, exactly agreeing with that of Aristotle and all ancient writers. In this passage Mill makes **Exchangeability**, and that only, the essence and principle of Wealth—that is, everything which can be bought and sold, or exchanged, no matter what its form or its nature may be. This definition manifestly includes all the three orders of Exchangeable Quantities—material products, personal qualities, and abstract rights. And if Wealth be *anything* which has purchasing power, the Production of Wealth must be the production of anything which can be bought and sold. Now having got this definition, which is perfectly correct, we might have expected that all controversies were at an end; and as the essence of Wealth is Exchangeability, the Science of Wealth can be nothing else than the Science of Exchanges, or the Theory of Value.

But at the end of the *Preliminary Remarks* he says—"The production of Wealth: the extraction of the instruments of human subsistence and enjoyment from the materials of the globe, &c." In this passage Mill has completely changed his fundamental concept of Wealth. Here he makes Wealth to be merely the instruments of human subsistence and enjoyment, and all to be extracted from the materials of the globe, and the quality of Exchangeability has totally disappeared. These two passages are in complete contradiction to each other, and we are once more plunged into Physiocracy, from which we had hoped to be delivered.

Now Mill admits that Personal Qualities are Wealth, both in the form of Labour and Personal Credit—and how are these extracted from the materials of the globe?

Mill admits abstract Rights, such as Credits or Debts, to be Wealth—and how are abstract Rights extracted from the materials of the globe?

In Book I., chap. iii., on Unproductive Labour, we are plunged into more confusion. He is recalled to the meaning of Wealth. He says—"Productive Labour means Labour productive of Wealth. We are recalled, therefore, to the question touched upon in our first chapter, what Wealth is, and whether only material products, or all useful products, are to be included in it."

He says that utilities produced by labour are of three kinds—(1) utilities embodied in outward objects; (2) utilities embodied in human beings; (3) utilities not embodied in any object, but consisting in a mere service rendered, a pleasure given, an inconvenience or a pain averted—*i.e.*, all labour and services.

He then says that utilities of the third class, which consist only in services which only exist while being performed, cannot be spoken of as Wealth except by an acknowledged metaphor.

But here Mill is in contradiction with all ancient writers, and, as is invariably the case, with himself. Aristotle says that Wealth is *anything* whose value can be measured in money; Ulpian says that Wealth is *anything* which can be bought and sold; and Mill says that Wealth is *anything* which has purchasing power.

Now labour and services, knowledge, have a value which can be measured in money—they can be bought and sold, they have purchasing power, and therefore they are Wealth.

But Mill says—"It is essential to the idea of Wealth to be susceptible of accumulation." Now here is a perfectly new idea introduced into the concept of Wealth. He says—"I should prefer, were I constructing a new technical language, to make the distinction turn upon the *Permanence* rather than upon the *Materiality* of the product."

Now this doctrine is a violation of one of the fundamental principles of Natural Philosophy—the *Law of Continuity*. Things whose value can be measured in money, which can be bought and sold, or have purchasing power, are of all degrees of permanence; from the land and many other things, such as diamonds, emeralds, and other precious stones, &c., which may last for ever, to things which have a constantly diminishing degree of permanence—such as houses, watches, clothes, food, &c., down to labour, which perishes in the using, and has the least degree of permanence. Now at what degree of permanence, and at what number of exchanges, are we to draw the line between Wealth and Not-Wealth? Mill gives us not the least clue. Now the *Law of Continuity* says, "That which is true up to the Limit is true at the Limit." Now the lowest Limit of Exchange is one, and the lowest degree of

Permanence is that which perishes in the act of exchange. These are what Bacon calls instances of Ultimity or Limit. Labour is only capable of one exchange, and it only exists during the act of performance. But it possesses the quality of Exchangeability, or the capability of being bought and sold; and therefore by the fundamental law of Natural Philosophy it is necessarily included under the title of Wealth. The question involved is no slight one, nor a piece of mere logomachy; it is simply whether Labour is to be considered as an Economic Quantity, and subject to the general Law of Value.

On the same page he says, "I shall, therefore, in this treatise when speaking of Wealth, understand by it only what is called material Wealth." But within an inch of this sentence he says, "The skill and energy and perseverance of the artisans of a country are reckoned part of its Wealth, no less than their tools and machinery." And why are not also the skill, energy, and perseverance of the lawyers, doctors, engineers, and all other professional men equally part of the Wealth of the country? Also he says, "Acquired capacities which exist only as a means, and have been called into existence by labour, fall rightly, as it seems to me, within that designation. Now are skill and energy, perseverance and acquired capacities, material wealth, and extracted from the materials of the globe?"

Again Mill fully admits that Personal Credit and Rights of Action are Wealth, as shewn under Credit. Now is Personal Credit, and are Rights of Action, material wealth, and extracted from the materials of the globe?

In his first book Mill maintains that Land, Labour, and Capital are required for the production of Wealth. But is everything which has purchasing power the product of land, labour, and capital? Are personal qualities, is knowledge and science, the product of land, labour, and capital? Are Rights of Action, which Mill acknowledges to be Wealth, the products of land, labour, and capital? Mill's master, Say, says that if a Bank can maintain in circulation an amount in Credit greater than the cash it holds in reserve, that augments the capital of the country. It is therefore the production of wealth; and is it the product of land, labour, and capital?

When, therefore, Mill says that every one has a sufficiently correct idea of what Wealth is, it appears that he has no correct ideas himself on the subject, and his notions are a chaos of confusion and contradictions.

Mill on Value.

We have now to see how Mill discusses Value, the next most important fundamental concept of Economics.

He rightly enough says—"Value is a relative term. The Value of a thing means the quantity of some other thing, or of things in general, which it exchanges for." But yet he is in some few instances betrayed into the absurdity of speaking of intrinsic value; as where in Book III. ch. xiii., he speaks of pieces of paper having no intrinsic value. However, we may pass these over.

The really important thing is what his ideas are of the Laws of Value.

Now Mill himself says, following Bacon, that Economics can only be erected into a definite, positive science by strictly following the methods which have been followed in constructing the Physical Science.

Which physical science is the type to be followed in constructing the science of Economics? Evidently it is Astronomy, because the fundamental problem in Economics is exactly identical with the fundamental problem in Astronomy. In Astronomy we have a series of quantities—the heavenly bodies, in constant motion, constantly varying their relative distances from each other, sometimes advancing, sometimes apparently stationary, sometimes receding, and the problem is to discover some single general Law which accounts for all these phenomena.

In Economics we have also a vast series of quantities, constantly varying in their exchangeable relations with each other, and the problem is to discover some single general Law which governs the varying relations of all these quantities.

All Economical writers before Smith held that the Law of Supply and Demand governed all these changes in Value, and they never made any attempt to prove it, because it was never denied, but always assumed.

With Smith the reign of chaos set in, because he never perceived the necessity of reducing all the phenomena of Value to a single general Law; but he goes along catching at a new Law of Value for every set of cases he happens to be discussing.

Ricardo rightly saw that this was inadmissible, and that it was necessary to devise general Laws of Value. But he was most unfortunate in his attempt, from his total want of knowledge of the principles of Natural Philosophy. Instead of collecting all instances of Value before forming a theory of Value, he considers

only material products the result of human labour, and he divides these into three classes, and contends that there is a distinct fundamental theory of Value for each of them. But this method is contrary to the fundamental principles of Natural Philosophy, and totally inadmissible.

Mill has adopted Ricardo's system in its entirety; but the slightest reflection will show that there are many other classes of commodities besides those mentioned by Ricardo.

Mill accordingly says that it is necessary to take notice of certain cases to which, from their peculiar nature, this Law of Value is inapplicable. As, for example, the case of two different commodities having a joint cost of production, being both products of the same operation; and the same outlay would have to be incurred for either of the two if the other were not wanted at all. As, for instance, gas and coke are both produced from the same material, and by the same operation; so also mutton and wool; beef, hides, and tallow; calves and dairy produce; chickens and eggs. "Cost of production," he says, "can have nothing to do with deciding the value of the associated commodities relatively to each other; it only decides their joint value. The gas and the coke together have to repay the expenses of their production with their ordinary profit." But how much of the remuneration of the producer shall be derived from the coke, and how much from the gas, remains to be decided. Cost of production does not determine their prices, but the sum of their prices. A principle is wanting to apportion the expenses of production between the two.

"Since Cost of Production here fails us, we must revert to a *Law of Value anterior to Cost of Production, and more fundamental, the Law of Supply and Demand.*"

So here Mill acknowledges that the Law of Supply and Demand is more fundamental than that of Cost of Production, which at once annihilates the false distinction, made by Ricardo and adopted by Mill, between the two classes of cases.

A little further on Mill says—"This theorem is not of any great importance; but the illustration it affords of the Law of Demand and of the mode in which, when Cost of Production fails to be applicable, the other principle steps in to supply the vacancy (! !), is worthy of particular attention, as we shall find, in the next chapter but one, that something very similar takes place in cases of much greater moment."

This mode of arguing in Economics is just as rational and as

admissible as it would be in Astronomy to say, "In this class of cases the Ptolemaic Theory fails us, and we must adopt the other, or Copernican Theory, to supply the vacancy" ; or in Optics to say, "In this class of cases the Corpuscular Theory fails us, and we must adopt the Wave Theory to fill the vacancy." The obvious analogy of Natural Philosophy shows that if a theory fails in any one case whatever, it fails in all.

In speaking of agricultural produce, Mill says—"There would be little difficulty in finding *other anomalous cases of Value*, which it might be a useful exercise to resolve."

He afterwards says—"This, then, is the Law of Value, with respect to all commodities not susceptible of being multiplied at pleasure. Such commodities are no doubt exceptions. There is *another Law* (!) for that much larger class of things which admit of indefinite multiplication. But it is not the less necessary to conceive distinctly and grasp firmly *the Theory of these exceptional Cases* (!!). In the first place it will be found to be of great assistance in rendering the common case more intelligible. And in the next place the principle of the exception stretches wider, and embraces more cases than might at first be supposed."

Now this Law which Mill treats as accounting for this exceptional case, by his own admission, governs the Value of Labour—the Rate of Discount—the Relation between Money and Credit—the whole Foreign Trade of the country—and the value of all other commodities at any particular time. He afterwards considers some "peculiar cases" of Value. Now if, according to Mill, the whole phenomena of Economics are made up of "Exceptional Cases," "Peculiar Cases," and "Anomalous Cases," what remains for the general body of the science? Absolutely nothing!

Ricardo and Mill break up Economic phenomena into a number of distinct classes of cases, and they assert that for each distinct class of phenomena there is a distinct Law of Value. Now, if each class of Economic Quantities has a different Cause of Value, how is it possible to have any Fundamental General Conception? and if each distinct class of phenomena has a distinct Fundamental Law of Value, how is it possible to have any General Theory of Value? The method followed by Ricardo and Mill entirely destroys the power of **Generalising** in Economics, and such a mode of treating a Physical Science would drive any Physical Philosopher frantic.

It is impossible to imagine a more glaring instance of the violation of the *Law of Continuity*, and of the *Continuity of Science*, than

Mill's Theory of Foreign Trade. He says—"Does the Law that permanent value is proportional to Cost of Production hold good between commodities produced in *distant* places, as it does between those produced in *adjacent* places? We shall find that it does not."

Again—"The value of commodities produced at the *same* place, or in places sufficiently *adjacent* for capital to move freely between them—let us say for simplicity, of commodities produced in the *same* country—depends (temporary fluctuations apart) upon their cost of production. But the value of a commodity brought from a *distant* place, especially from a foreign country, does not depend on its cost of production, or the place from whence it comes; on what, then, does it depend? The value of a thing in any place depends on the *cost of its acquisition* in that place, which, in the case of an imported article, means the cost of production of the thing which is expected to pay for it."

Now here is an obvious fundamental fallacy. Mill says that if cotton goods to the value of £50 are exported, and wine is imported in exchange for them, which is worth £100 in the importing country, the value of the wine to that country is £50! It is obvious that this is to confound the Cost of a thing with its Value.

This is exactly as absurd as to say that if a man expends £1 on producing an article which he can sell for £5, the Value of the article to him is £1!

Mill then says—"The value, then, in any country of a foreign commodity depends on the *quantity of home produce* (!) which must be given to the foreign country in exchange for it. In other words, the values of foreign commodities depend on the terms of international exchange. What, then, do these depend upon? What is it which, in the case supposed, causes a pipe of wine from Spain to be exchanged with England for exactly that quantity of cloth? *We have seen that it is not their cost of production.* If the cloth and the wine were both made in Spain, they would exchange at their Cost of Production in Spain; if they were both made in England they would exchange at the Cost of Production in England; but all the cloth being made in England, and all the wine in Spain, they are in circumstances to which we have already determined that the Law of Cost of Production is not applicable. *We must accordingly, as we have done before in a similar embarrassment, fall back upon an antecedent law, that of Supply and Demand, and in this we shall again find the solution of our difficulty.*"

Mill's doctrine, therefore, is that in the exchange of commodities between adjacent places, and in those of the same country, the

law of Value is *Cost of Production*: but that in the exchange of commodities between distant places and foreign countries, the law of Value is that of *Supply and Demand*.

To examine this doctrine properly we must separate the cases; because distant places need not be foreign places; and foreign places need not be distant places.

London and Melbourne are *distant* places, but they are not *foreign* places: Lille and Ghent are *foreign* places, but they are not *distant* places.

Mill affirms that the Law which governs the value of commodities exchanged between *adjacent* places is fundamentally different from the Law of Value of commodities exchanged between *distant* places. He says that if commodities are exchanged between London and Southwark their Value is governed by *Cost of Production*; but if they are exchanged between London and Melbourne their Value is governed by *Supply and Demand*.

Now, if this doctrine be true, there must be some precise spot between Southwark and Melbourne at which the law of Cost of Production changes into that of Supply and Demand. Where is this spot? Is it in the chops of the Channel? Is it at the Equator? Is it at the Cape of Good Hope?

If Mill's doctrine is true, let us gradually and continuously increase the distance between the adjacent places until they become distant to each other; and at this particular spot the Law of Cost of Production suddenly and violently changes into that of Supply and Demand. Let us suppose that a ship passes from one place to the other; and that at a particular time the centre of the ship is exactly at this spot; then, according to this doctrine, the Law of Value in the stern of the ship will be that of Cost of Production; the Law of Value in the bows of the ship will be that of Supply and Demand!

But Mill says that the Law of Value of commodities exchanged in the *same* country is Cost of Production; of those exchanged between *foreign* countries is that of Supply and Demand.

Now, London and Melbourne, and St. Petersburg and Kamschatka, are in the same country; therefore, according to Mill, the Law of Value between them is that of *Cost of Production*.

But they are *distant* places; therefore, according to the same Mill, the Law of Value between them is that of *Supply and Demand*!

Lille and Ghent are *adjacent* places; therefore, according to Mill, the Law of Value between them is that of *Cost of Production*.

But they are *foreign* places : and, therefore, according to the same Mill, the Law of Value between them is that of *Supply and Demand* !

Again, places that are at one time foreign to each other may, by the union of the two countries, become of the same country. England and Scotland were once foreign to each other : but by the Union they became one country.

According to Mill, while they were foreign countries the Law of Value between them was that of Supply and Demand : when they became one country the Law of Value between them became that of Cost of Production.

So that on the very day and instant at which the Act of Union came into effect, the Law of Value between the two countries underwent a sudden and fundamental change ! Certainly this was an effect of the Union which no one ever suspected before.

Until very recently Italy was divided into a number of separate States, which were foreign to each other : and therefore the Value of Commodities was governed by the Law of Supply and Demand. Italy is now, happily, united and become one country : and consequently Values are governed by the Law of Cost of Production ! That is to say, the unification of Italy has produced a fundamental change in the Laws of Value ! It would be just as rational to say that the unification of Italy has produced a fundamental change in the Law of Gravity : or in the principles of Astronomy : or in the laws of Optics.

The slightest consideration will show that such fantastic notions cannot be received as sound philosophy.

Having thus shown the unphilosophical basis of Mill's "Theory of International Values and International Trade," we need not examine them any more, nor his alleged "Equation of International Demand." Such things cannot be fundamental Laws of Economics, because it is a mere *accident* that countries are foreign to each other. When countries coalesce and become one, what becomes of International Values, and International Trade, and the Equation of International Demand ? They simply collapse and vanish into nothing, and with them the Ricardo-Mill system of Economics.

It has long ago been observed that for the purpose of trade the whole earth is one nation, and that the Laws of Value must be the same in all places, in all times, and between all places, adjacent or near, home or foreign.

Mill then in Book III., ch. vi., gives a summary of the Theory of Value, in which he contends that there are seventeen Laws of Value,

whereas the Laws of Natural Philosophy show that there can only be one. He also says, "Happily there is nothing in the Laws of Value which remains for the present, or any future writer, to clear up" !

Was there ever a more astounding instance of complacent self-delusion ?

Now would such a mode of argument be tolerated in any other Physical Science ?

Taking Astronomy and Optics as typical examples of a Physical Science, the purport of the science is to discover a single General Theory which governs **all** the phenomena : and there can be **only one** General Theory. It would be utterly contrary to the fundamental nature of a Physical Science to suppose that every distinct class of phenomena was based upon a distinct fundamental Theory.

Both in Astronomy and Optics different fundamental Theories have been held at various times : but no one ever supposed that more than one theory could be true : no one ever dreamt of writing a treatise on Astronomy in which one chapter was based upon the Ptolemaic Theory : another chapter on the Theory of Tycho Brahe : and another chapter on the Theory of Copernicus.

No one would ever dream of writing a Treatise on Optics in which one class of phenomena were explained by the Corpuscular Theory of Light : and another set of phenomena by the Undulatory Theory.

If, then, Economics is a Physical Science, and to be treated after the method of a Physical Science, it is the essential condition of its being so that all the phenomena in it should be reduced to one grand General Theory. Economics is simply a new order of Variable Quantities : and consequently it must be subject to the Grand General Theory of Variable Quantities in general.

We have now shewn what a chaos of confusion and contradictions Mill's notions are on the two fundamental concepts of Economics. But these are merely specimens of his whole work. We need not give any more examples here, but we have shown his confusion and contradictions on **Banking, Capital, Credit, Rate of Profit, Rent, &c.**, under these respective articles.

The fact is that Economics has burst the bonds of the Physiocrate nomenclature. The fundamental concepts of the Economists were framed to include material products only ; and when Adam Smith, Say, and Mill came and included in the science such things as immaterial products and abstract rights, the definition became unintelligible. But the attempt was hopeless, and only led to confusion. It was like putting new wine into old bottles ; and

Bacon says it is idle to expect any great advancement in science from superinducing and engrafting new things upon old. We must begin again from the very foundations. The fundamental concepts of the Economists will no more fit the facts of nature than the clothes of an infant will fit a full-grown man. We must have concepts and axioms which include indifferently all the three orders of Economic Quantities. The works of Smith, Ricardo, Say, and Mill are simple anarchy, and like those of the Economists have passed away, and for the same reasons they are not general—they are totally repugnant to the fundamental principles of Natural Philosophy, and they are not conformable to nature.

Principiis tamen in rerum fecere ruinas
Et graviter magni magno cecidere ibi casu

Amplexi quod habent perverse prima viai.

Reaction against the Economics of Jean Baptiste Say and John Stuart Mill.

FREDERIC BASTIAT.

For nearly half a century the Economics of J. B. Say reigned supreme in France, and when J. S. Mill introduced it, though with many divergences, into England in 1848, his work was saluted by his friends and an uncritical public with unbounded applause, and was supposed to have brought Economics to the highest state of perfection; and for many years it was supposed that it was as futile to criticize Mill as to criticize infallibility itself. Whatever Mill asserted was to be accepted without doubt or profane questioning.

But soon after the publication of Mill's work a reaction began in France, and has gone on increasing to the present time, and the most advanced Economists throughout the world have come to see that it is impossible to erect Economics into a positive and definite Science on the system of Say and Mill, and that this can only be done by reverting to the original conception of its founders—that it is the Science of Commerce or Exchanges, or the **Theory of Value.**

Frederic Bastiat, the brightest genius who ever adorned the science of Economics, was born in 1801, the son of a merchant at Bayonne. He was left an orphan at the age of nine, and was brought up under the care of his grandfather, who had a small estate at Mugron, in the department of the Landes. After being at college he was placed in his uncle's house of business at Bayonne, in his 19th year. At

first he thought that the business of a merchant was purely mechanical, and could be picked up in a few months. But he was soon disabused, and found that the science of commerce was not mere routine, and that a merchant, besides his books and ledgers, ought to study the Laws of Economics.

Having succeeded to his grandfather's property of Mugron, and thereby having acquired a competence, he left commerce and devoted himself to study. He read Adam Smith and J. B. Say, for whom at that time he had a great admiration, and other Economists. He also devoted much attention to English and Italian literature, as well as philosophy. Thus, for several years his life passed away in deep study and peaceful meditation, and filled some departmental offices.

Bastiat had written a few minor articles shewing great ability, and containing many of the ideas he afterwards developed with such surpassing brilliancy, which appeared in the provincial journals: but it was in July, 1844, that his first article appeared in the *Journal des Economistes* which announced to the world that a great Economical writer had arisen.

We must pass over his inimitable *Sophismes Economiques*, also his strenuous efforts, in company with Michel Chevalier, to found a Free Trade league in France, in imitation of the Anti-Corn-Law League in England, because all we have to do with in this place is to ascertain what his views were of the nature and objects of the science of Economics. He began, as said above, by having a great admiration for J. B. Say, whose work was then the great standard work on Economics in France, and held the same position there as the *Wealth of Nations* did in England. But when he came to declare his own views as to the nature and objects of Economics, he entirely abandoned the system of J. B. Say, and reverted to the original conception of it as the Science of Commerce or Exchanges, or the **Theory of Value**.

In his *Harmonies Economiques*, under *Besoins, Efforts, Satisfaction*, he investigates the true limits and objects of the science of Economics. He determines that it is founded upon the wants of mankind, and their reciprocal services ministered to their reciprocal wants and desires.

“It is, in fact, this faculty given to man, and to man only, among all creatures, to labour for each other: it is this transmission of efforts, this exchange of services, with all their complicated and infinite combinations to which it gives rise through time and space: it is that precisely which constitutes Economic Science, shows its origin, and determines its limits. . . .

"To accomplish an effort, to satisfy the wants of another, is to render him a service. If a service is stipulated in return, there is an exchange of services: and as that is the most usual case, Political Economy may be defined as the Theory of Exchange.

"Whatever may be the degree of want of one of the contracting parties, or the intensity of the effort of the other, if the exchange is free, the two services exchanged *are of equal value*. Value consists, then, in the comparative appreciation of reciprocal services, and so one may say that Political Economy is the **Theory of Value**."

In the article on Value, Bastiat investigates the conception of Value, and shews that it is entirely founded on the mutual appreciation of services interchanged, and not upon labour.

"Thus the definition of the word Value, to be correct, should regard not only human efforts, but also those efforts exchanged or exchangeable. Exchange does more than state and measure values, it gives them existence. I do not say that it gives existence to the acts, or to the things which are exchanged, but it gives them the notion of Value.

"I say, then, that Value is *the relation of two services exchanged*.

"The idea of Value entered into the world the first time that a man said to his brother, 'Do this for me, and I will do that for you.' They came to an agreement: for then, for the first time, one could say the two services exchanged were equal in value.

"By means of exchange, we labour to provide food, clothing, shelter, light, to heal, to defend, instruct each other: thence reciprocal services. These services, we compare them, we discuss them, we *value* them: thence **Value**."

He shews that many circumstances affect Value, and points out the false origins which have been attributed to the word.

"Up till now, the principle of Value has been sought for in one of the circumstances which augment it or diminish it, materiality, durability, utility, scarcity, labour, difficulty of acquisition, judgment, &c.: a false direction impressed from the beginning on the science, because the accident which modifies the phenomenon is not the phenomenon. . . . Thus the principle of Value is for Smith in materiality [Smith has admitted that both Personal Qualities and Abstract Rights have Value] and durability, for Say in utility, for Ricardo in labour, for Senior in scarcity, for Storch in judgment, &c."

He then shows the confusion into which the science has been thrown by these contradictory conceptions, and shews that the only true source of Value is Exchangeability.

The natural consequence of this view is that all services which are exchanged are Economical elements, whatever their nature may be, whether material or immaterial: and that all labour is productive labour which produces any service which is wanted. Hence those persons who satisfy any of our mental desires, such as opera-singers, are included in that category. Bastiat then points out at great length the erroneous conclusions to which the doctrines of preceding Economists on the conception of Value, lead.

So again in *Organisation Naturelle* he says: "We should shut our eyes to the light if we refused to acknowledge that society cannot present such complicated transactions, in which the civil and penal laws have so little part, without obeying a wonderfully ingenious mechanism. *This Mechanism is the object of Political Economy.*"

Thus Bastiat entirely emancipated himself from the evil influence of J. B. Say, whom he had admired so much at first. He plucked up by the roots the noxious fallacies which are the Economics of Adam Smith and Ricardo, that all Wealth is the produce of land and labour, and that labour is the cause of all Value, which are the doctrines upon which the Socialists found their systems.

He wrote a vast number of piquant and vivacious pamphlets assailing Protection and Socialism, and other false doctrines of Economics, then current. But unfortunately he did not live to construct a definite system of Economics on the fundamental ideas he had so lucidly expounded. After a short but brilliant career of six years he was cut off in the maturity of his powers, and in the very height of his reputation, in 1850.

Bastiat has been called the founder of the third school of Economics. But this is a misconception. He simply cleared away the stupendous chaos and confusion and mass of contradictions of Adam Smith and J. B. Say, and reverted to the unanimous doctrine of the ancients, of which he does not seem to have had any knowledge, that **Exchangeability** is the sole essence and principle of Wealth: and that Value is not a quality inherent in an object, but is simply the relation between any Economic Quantities which are exchanged: and that Economics is the science of Commerce or Exchanges, or the **Theory of Value**: a conclusion in which the most advanced Economists in the world are now agreed.

The Author.

I had been interested in Economic subjects from my earliest youth, but in 1854 I was compelled by circumstances to investigate thoroughly the current works on Economics. At this time, nor for several years afterwards, I had not read a line of the works, nor even heard of the name, of Bastiat.

My father was Roderick MacLeod, of Cadboll and Invergordon Castle, in the counties of Ross and Cromarty, Lord Lieutenant of the county of Cromarty, and member of Parliament for the county of Cromarty, the county of Sutherland, and the Inverness district of Burghs. I was educated at Eton and Trinity College, Cambridge, where I graduated in mathematical honours in 1843.

When I was a student at Cambridge, from 1839-43, the Anti-Corn Law League was carrying on a vigorous campaign for the repeal of the Corn Laws. As my father's property consisted entirely in land, I naturally took an interest in these discussions, and became an academical believer in Free Trade. But in 1842 I received an object lesson which made a deep impression on me. In company with some friends I visited Manchester, which was then in a state of the deepest distress, and the chief of the police told us that an outbreak might take place at any moment. When I saw the stunted, miserable, and woebegone appearance of the working people, I was at once convinced that it was intolerable that the necessary food of the toiling millions should be taxed for the sole purpose of keeping up landlords' rents, and I then became an uncompromising Free Trader.

My father having suffered severely in his health from his attendance in Parliament, was ordered by his physician to reside in a warm climate; and my elder brother serving in the navy, he associated me in the management of his estates; and, under the tutelage of one of the wisest and best men I ever knew, I acquired a knowledge of the management of a considerable amount of landed property before I had ever heard of any theories on the subject, and laid up a store of observations on the subject which were of essential use to me afterwards, when I was obliged to investigate the whole science of Economics.

In 1847 I commenced studying in the chambers of Mr. Edward Bullen, one of the most able and accomplished lawyers of his day, and the great master of the art of special pleading; and, of course, became thoroughly acquainted with *Byles on Bills of Exchange*, which was then regarded as the standard authority on the subject.

Although my father was ordered to reside in a warm climate, he made periodical visits to Scotland. He made one of these in 1846, when a dissolution of Parliament was certain to take place in the ensuing year. Although the largest agricultural proprietor in the counties, he was a Liberal and an earnest Free Trader, and most cordially approved of the repeal of the Corn Laws by Sir Robert Peel. The counties were then represented by an ultra-Protectionist. But Mr. (afterwards Sir) James Matheson, who had left Sutherlandshire as a youth, and gone to the east, and had become a member of the great China house of Jardine, Matheson, and Co., had returned with a large fortune, and had purchased from the Seaforth trustees the island of Lewes, formerly the possession of the great Hebridean chief, MacLeod of the Lewes, and was then member of Parliament for the borough of Ashburton, in Devonshire. My father got up a requisition to Mr. Matheson to stand for the counties upon Free Trade principles in opposition to the Protectionist member. The constituency then numbered a little over 700 electors. Of these, sixty were my father's tenants, and they signed the requisition unanimously. Mr. Matheson had seventy electors on his own property, and he acceded to the requisition. When the general election came in 1847, this combination was too powerful to be resisted. The Protectionist member retired, and Mr. Matheson was returned without opposition. On this occasion I had the opportunity, as representing my father, of making an earnest Free Trade speech in support of Mr. Matheson on the hustings, and ever since then the counties (now one) have been represented by a Free Trade member.

Very soon after this election I was called upon to undertake the solution of an important Economical problem. Owing to the great disruption of the Scottish Church, in 1843, the administration of the Poor Law had fallen into utter confusion. Up to that time the poor had been supported by the weekly contributions of the congregation at church. But when the Free Church seceded, leaving scarcely one per cent. in the Highlands in the Established Church, their contributions were given to the support of their own ministers, and it became necessary to levy rates for the support of the poor, which had hitherto been almost unknown, at least, in the Highlands.

The Scottish Poor Law Amendment Act, 8 and 9 Vict. 1845, c. 83, authorised levying rates for the relief of the poor. It also authorised the building of poor-houses by single parishes, or by combinations of parishes; but it did not require them to be built, as the English Poor Law did, nor did it enact that the offer of relief in

a poor-house should be an adequate offer of relief, so as to bar the claim of a pauper to be relieved from the rates who had refused to enter the poor-house.

The consequences of passing an Act to levy rates for the relief of the poor, but at the same time instituting no test to prove the applicants' necessities, were obvious. In a very short time the rates rose from £300 to £3000; and if an applicant was dissatisfied with the allowance made to him, he raised an action in the Court of Session. The prospect was most alarming, and the district in which I resided, consisting of nine parishes, appointed a Committee to consider what was to be done. This Committee elected me their chairman, and entrusted me with the responsibility of devising a more satisfactory system of Poor Law relief.

The question was, however, surrounded with considerable difficulty. The old Poor Law of Scotland consisted of some old Acts and Proclamations of the 16th and 17th centuries, which had never been really enforced. Now, in Scotland, contrary to the case in England, if Acts of Parliament fall into desuetude, and for a considerable time cease to be worked, they cease to be valid. The old Acts seemed to contain the powers I wanted, but the question was, whether they could be so enforced at the present day so as to make an offer of relief in the poor-house a valid tender of relief. I came to the conclusion that they were still valid, and capable of being enforced at the present day, and I drew up a Report, recommending that the nine parishes should combine, and erect a common Poor-house. This Report was adopted unanimously by the nine parishes. The Poorhouse was built, and was perfectly successful. While the poor rates had increased in every other district in the North of Scotland, in Easter Ross alone they considerably diminished. This was the first Poor Law Union in Scotland, and in 1852 the Board of Supervision requested me to draw up a Report, to be presented to Parliament, so as to encourage other districts to form similar Unions. My Report appeared in the Seventh Annual Report of the Board of Supervision in 1852. The example set by Easter Ross was speedily followed in other parts of the country, and in a few years the whole of Scotland was formed into Poor Law Unions.

All this time I had never read a line of any work on Economics, though of course I knew that Adam Smith, Ricardo, and John Stuart Mill had great reputations as Economists. But in 1854 I was compelled to go thoroughly into the whole subject of Economics.

In that year I was invited to join the direction of a Joint Stock Bank, which had been formed under Sir Robert Peel's Joint Stock Banking Act of 1845. I had not the slightest knowledge of Banking, and never should have dreamt of seeking such a position, but as it was offered to me, thinking that it would be of great advantage to me in my profession to gain a practical insight into mercantile business, I accepted the invitation. As soon as I joined the Board, I was informed that they had a long-standing controversy with the Board of Trade. All Banks by the Act had to be founded by Charters from the Board of Trade. In granting the Charter, which was prepared by the legal adviser of the Board of Trade, certain clauses were inserted containing provisions for the future progress of the Bank, which were essential to its existence, and if they had not been granted, the Bank would never have been founded. When the directors applied to the Board of Trade to grant the further powers contained in these clauses, they were astonished by the Board of Trade peremptorily refusing to do so, alleging that their legal adviser, who had himself drawn them, declared that they were illegal, and that the Crown had no power to act in accordance with them. The directors placed their whole case before me, and I gave it as my opinion that the clauses were perfectly legal, and I said that I could draw such a case as would prove to the Board that they were in error. The Board of Trade then said that if such a case were drawn, they would refer it to the Law Officers of the Crown, and would abide by their decision. I accordingly drew the case, and it was submitted to Sir Alexander Cockburn and Sir Richard Bethel, the then Law Officers of the Crown, and they at once gave their decision in my favour.

It was this case which was the origin of the modern Science of Economics.

As the points raised by the case were perfectly novel, I thought that there might perhaps some light on them to be found in the current books on Economics, and I then began, for the first time, to study Adam Smith, Ricardo, and Mill. I had not the slightest idea what the Science of Economics was. I expected to find treatises on a Science somewhat of the nature of those on Physical Science, to which I was accustomed. Being perfectly familiar in practice with all the subjects which these works treated about, I can hardly express the disappointment I felt at reading them. It was true that they had done immense services in clearing away old prejudices and impediments to trade, but for the purpose of describing the actual principles and mechanism of commerce they were absolutely worth-

less. They were merely a chaos of confusion and contradictions. **They** were utterly unable to give any true scientific definitions, or if **they** sometimes did hit upon a good definition, they were unable to **adhere** to it. They never made any attempt to give any exposition of the actual facts of business, as treatises on science are bound to **do**. They were in flat contradiction to themselves and to each other on every single point. In fact, they were in no sense a science, but **the** butchery of a science. I saw that the greatest opportunity that **had** come to any man since the days of Galileo had come to me, **and** I then determined to devote myself to the construction of a **real** science of Economics on the model of the already established **physical** sciences. Even then, from the study of these works, I **could** discern from Adam Smith, Ricardo, and especially Whately, **that** Economics is in reality the Science of Exchanges or of **Com-**
merce, or the Theory of Value.

I found that they had not the faintest idea of the juridical **principles** and the mechanism of the great system of **Mercantile Credit**, Banking, and the Foreign Exchanges.

One subject of supreme importance at that time demanded **thorough** investigation—Commercial Crises and Monetary Panics. **Ever** since 1793 the commercial world had been periodically **convulsed** by Crises and Panics, but no one had succeeded in **demonstrating** how they were to be brought under scientific control. **The** Bank Act of 1844 had been supposed to have rendered them **impossible**, but only three years after its enactment it completely **broke** down, and had to be suspended to save the country from **general** bankruptcy.

The first work I undertook was the *Theory and Practice of Banking*, and I determined to bring the question which had so long **baffled** financiers and statesmen to a final conclusion.

I investigated the history of Banking from its origin in this **country**. I carefully studied the principles by which the Bank of **England** had been managed from its institution, and especially since the great monetary panic of 1793. I carefully studied the great Bullion Report of 1811, all other parliamentary reports upon banking, and all the debates in Parliament.

Ever since 1800 the Bank has been managed on a succession of theories, each one of which was regarded as the acme of wisdom in its own day, and was condemned as the *ne plus ultra* of folly by the next generation. The extravagant issues of paper money by the Bank, in pursuance of their theory of 1800, had caused a serious depreciation of the Bank Note and an export of gold, so that there

was scarcely any gold left in circulation. This gave rise to the Bullion Committee, who showed that there were two causes of export of gold; (1) an adverse balance of trade, and (2) depreciation of paper money. Proposals were made to impose a limit on the power of the Bank to issue Notes; but the Bullion Report expressly condemned any such limitation for reasons fully stated in my *Theory and Practice of Banking, and Theory of Credit*: and Banking authorities concurred in this opinion. Sir Robert Peel, in 1819, said that there never would come a time when he would assent to such a limitation. The Bullion Report laid down that the Bank should regulate its issues of paper by the market, paper, price of bullion and the state of the Foreign Exchange. But they omitted to state how this was to be done. For some time the Bank repudiated these doctrines, but ultimately adopted them, and endeavoured to frame a theory to carry them out. Yet Commercial Crises and Monetary Panics continued to recur. At last, in 1844, Sir Robert Peel undertook to frame an Act which should automatically compel the Bank to conform to the doctrine of the Bullion Report, under the guidance of Lord Overstone, Colonel Torrens, and others. Sir Robert Peel adopted the theory that all Commercial Crises and Monetary Panics were due to excessive issues of Bank Notes, and that if he could prevent that, Commercial Crises and Monetary Panics would be prevented from occurring. The Act was founded on a new set of theories. (1) That only Coin and Bank Notes payable to bearer on demand are currency, to the exclusion of Cheques, Bills of Exchange, and all other forms of credit. (2) That if Bank Notes are permitted to be issued, they ought to be exactly equal to what the coin would be if there were no Bank Notes. The Bank of England was reconstituted in such a way that it was supposed that beyond a certain fixed amount, Bank Notes could only be issued in exchange for gold paid in, and that if gold was drawn out an equal amount of Bank Notes must be cancelled. The framers of the Act supposed that gold could only be drawn out of the Bank by means of Notes. Then came the crisis of 1847, and to the astonishment of everyone, gold continued to ebb away from the Bank, *and not a single Note was withdrawn from circulation!* On the contrary, while the gold continued to diminish, the Notes rather increased. The wonderful wiseacres who concocted the Bank Act had quite forgotten the fact *that gold may be drawn from the Bank by means of Cheques as well as Notes!*

My experience in banking had brought to my knowledge a

which, as far as I am aware, has never been stated in any book; it was never mentioned in evidence before any Committee nor in the debates in Parliament. It was this: "*That when the Rate of Discount in two markets differs by more than sufficient to defray the cost of sending bullion from one to the other, bullion flows from the market where discount is lower to where it is higher.*"

The fact is that when two markets are in such a position, Bullion dealers fabricate Bills for the express purpose of having them discounted by the Bank. When the bills are discounted, the Bullion dealers obtain a Deposit, a Credit, in the Bank, and they immediately draw out the gold by means of Cheques, and not by Notes. Thus every ounce of gold may be drawn out of the Bank, and not a single Note withdrawn from circulation, as all but happened in 1857. Thus I added a third cause of the export of gold, to the two mentioned in the Bullion Report. Thus I laid down this principle:

The true supreme power of controlling Credit and Paper Currency is by adjusting the Rate of Discount by the bullion in the Bank, and by the state of the Foreign Exchanges.

The truth of this principle is now universally recognised, and every Bank is now governed by it.

One day at the Political Economy club, Sir John Lubbock observed to me that this was the greatest discovery of the age.

This principle completes the Theory of the Bullion Report, and the theory of Credit and Paper Currency is now complete.

I next determined to investigate the history of Economics so as to arrive at a definite conclusion as to the nature and purpose of the science.

I found that Adam Smith was not the founder and creator of Economics and Free Trade, as was so commonly supposed in this country, but that it was first founded as a definite science by the effect of the Economists in France about 1750, and that they expressly declared that it is the science of Exchanges, or of Commerce, or the Theory of Value, as detailed above. The Economists, however, in an unhappy moment, devised an alternative and equivalent definition of the science as that of the "*Production, Distribution, and Consumption of Wealth.*" I have shown above how these two apparently conflicting ideas are to be reconciled. Then I found that J. B. Say, seizing upon this unfortunate alternative definition, and quite perverting the meaning of its terms, in which he had been followed by Mill in a general way, had quite ruined Economics as a science. I then saw that it was necessary to reject entirely the

system of Say and Mill as a science, though containing many good ideas. I saw that Economics can only be made a definite and positive science by reverting to the concept of its founders as the science of Exchanges.

In 1857 I published my *Elements of Political Economy*, in which Economics was, for the first time, exhibited as the science of Exchanges, and gave the details of business, and not mere abstract principles. This was the first work in Economics which gave an exposition of the mechanism of Credit, Mercantile, Banking, and the Foreign Exchanges. A very grave defect I observed in the current works on Economics was that they gave very insufficient attention to the Theory of Money. I gave in it for the first time a sketch of the history of the Currency in England, and in the investigation of this I came upon the great law which Sir Thomas Gresham explained to Queen Elizabeth, that good money and bad money cannot circulate together in a country, but that the bad money drives out the good money, and alone remains in circulation. I saw at once the great importance of this law, and I suggested that it should be called "**Gresham's Law.**" This has now been universally accepted, and it is known throughout the world. It is a law of supreme importance, and has been found to be true in all ages and countries.

Further, I adopted Lord Lauderdale's Law of Value as the great Law of Value, or the general Equation of Economics, and showed that it governed all the phenomena of Value, and that there are not a multitude of Laws of Value, according to Smith, Ricardo, and Mill. Thus for the first time there was a treatise on Economics, framed on the model of the standard works on physical science.

M. Michel Chevalier was then by far the most distinguished professor of Political Economy in Europe, and I sent him a copy of the work, with the request that he would examine it. In answer to this he sent me the warmest approval of my work, and continued a steadfast adherent of mine ever after.

The more I read of Economics the more confusion and contradictions I found, and I said in my *Banking*, "*The time has come when all Political Economy must be re-written.*"

Though I carefully read the French Economists from the time of the Physiocrats, I found that I had far from come to the bottom of the subject. I therefore prosecuted the search for two thousand years, and at last, in the writings of the ancients, I reached a firm and sure foundation.

The ancients unanimously held that **Exchangeability** is the

sole essence and principle of Wealth, and that every thing whatever which can be bought and sold or exchanged is Wealth, no matter what its nature or form may be. Thus the doubts and difficulties and discussions of centuries were solved at once.

Aristotle says, "By the term Wealth we mean all things whose Value can be measured in Money." A dialogue, termed the *Eryxias*, showed that Labour is Wealth because it is exchangeable, it can be bought and sold, its value can be measured in money. Demosthenes showed that Credit is Wealth and Capital. At this time I had not studied Roman Law, but every lawyer and man of business knows that a vast variety of Rights and Rights of Action can be bought and sold or exchanged, and their value can be measured in money, and they are called in law Incorporeal Wealth. Afterwards, when I came to study Roman Law, I found that it is expressly laid down in the Pandects that Rights and Rights of action are included under the terms *Pecunia*, *Bona*, *Res*, *Merx*, as they are in every system of jurisprudence.

Thus the ancients held unanimously that anything is Wealth where and when it can be exchanged or bought and sold; that where and when a thing cannot be exchanged or bought and sold it is not Wealth.

This definition is clear, simple, and decisive, and clears away mountains of futile discussion by ill-informed writers, and it is the true foundation of the whole science.

I found that the only way to deliver Economics from the unintelligible tangle into which it had fallen at the hands of ill-informed writers, and to place it on a strictly scientific basis, was (1) to institute a thorough investigation into its history and the different concepts of its nature and purpose which had been held at different times; and (2) to investigate thoroughly its fundamental concepts and axioms by means of a separate article given to each, examining the contradictory and imperfect doctrines which had been held, and subjecting each of these to the established laws of Inductive Philosophy.

Such was the object and purpose of my *Dictionary of Political Economy*. Its plan was—

(1) To collect as complete a catalogue as possible of writers on Economics and their works.

(2) To give a biographical sketch of the principal writers, and a full analysis of their works.

(3) A separate article on each of the fundamental concepts and axioms of the science, tracing its history, and the various contra-

dictions and confusion of different writers, and coming to a conclusion on each according to the recognised laws of Inductive Philosophy, so as to be, in fact, a complete Encyclopædia on subject.

Accordingly, besides the catalogue and notices of minor writers I have given biographies of J. Q. Adams, Æschines Socraticus, Anderson, Aristotle, Bailey, Bastiat, Baudeau, Beccaria, Bentham, Bodin, Boisguillebert, Burke, Burton, Calonne, Calvin, Chadwick, Chalmers, Chevalier, Cobden, Colbert, Condorcet, Condorcet, with a full analysis of their writings on Economics.

It was in writing the biography of Bastiat that I first came across his name and became acquainted with his writings. I can express the delight I felt in reading his vivid and brilliant works different from the muggy works in common use. I was delighted to find that his ideas in Economics were exactly the same as my own, and I was so surprised to find so many coincidences on fundamental concepts of Economics with my own, that I was obliged, in case people might think that I had conveyed Bastiat's ideas without acknowledgment, to state that though my *Banking* was published in 1855, and my *Elements of Political Economy* in 1857, that I had no knowledge of his works till May, 1859. I read through the whole of Bastiat's works, and wrote the article for *Dictionary* in eight days, and I was much gratified to be told by M. Paillotet, his lifelong friend and admirer, and literary executor, that he had derived from my article a much clearer idea of the nature of Bastiat's doctrines than from the constant study of them by himself.

I also gave separate treatises on Absenteeism, Annuities, Antiquities, Ateliers Nationaux, Axioms and Definitions, Balance of Trade, Bank, History of Banking in England, Scotland, Ireland, America, France, Italy, Rome, China, Holland, Bank Note, Bill of Exchange, Bill of Lading, Bullion Report, Capital, Cash, Credit, Cheque, Circulating Medium, Circulation, Clearing House, Coins, History of the Coinage of Greece, Rome, Great Britain, France, Decimal Coinage, Consilience of Inductions, Consumption, Law of Continuity, Copyright, Cost of Production, Credit, Credit Foncier, Commercial Crisis, Currency.

In my article on Axioms and Definitions, and other articles on Inductive Logic, I showed that the Ricardo-Mill system of Economics is in direct violation of all the fundamental laws and principles of Inductive Philosophy.

In my *Banking* and *Elements of Political Economy*, I had for

first time given an exposition of the actual mechanism of the system of Credit, but upon reflection I found it necessary to go much more deeply into the subject. I investigated the fundamental concepts of the Theory of Credit, and explained its juridical principles and their applications in practical business. Furthermore, I remembered that mathematicians had, for a long time, termed Debts Negative Quantities, but only two mathematicians, Euler and Peacock, had attempted to explain the application of the Theory of the Algebraical Signs to the Theory of Credits and Debts. But I found their attempts to be a mass of confusion and errors, from their want of knowledge of Mercantile Law and practical business. Their explanation violated five distinct branches of science. I then explained the real application of the Theory of Algebraical Signs to the Theory of Credit and Debt.

At this time I had never studied Roman Law ; but in 1868 I, for the first time, made myself acquainted with it, and to my surprise and delight I found that every word that I had said in my article on Credit was given in the Pandects 1300 years ago. Consequently, in the subsequent editions of my works, I introduced the whole Roman Law on Credit and Debt bodily. I also found that I had brought the subject to a more complete state than it was in the Pandects, because the Romans knew nothing of the Theory of Algebraical Signs, which has, indeed, only been fully understood by mathematicians themselves within the last sixty years.

The first volume of my *Dictionary* was published in 1863 ; it was received with the warmest approval by the most distinguished Foreign Economists, but, of course, the devotees of John Stuart Mill utterly ignored it. I wrote every word of it myself, and published it at my own expense, but it scarcely paid its expenses, and I did not think it advisable to continue such thankless work.

In 1862 M. Michel Chevalier presented a Report to the Academy of Moral Sciences of the Institute of France, in which he declared his entire cohesion to my system of Economics. This Report was published in the *Journal des Economistes* for August.

In 1862 the meeting of the British Association for the Advancement of Science was held at Cambridge. I was Secretary to the Economic section, and I thought it a favourable opportunity to bring forward an account of the new system of Economics, which had been so favourably received by the most distinguished foreign Economists, to the notice of the meeting, and to draw their attention to the existence of Negative Economic Quantities.

In 1863 I completed the first volume of my *Dictionary of Political*

Economy. Immediately it came to the notice of M. Rouher, one of the most distinguished advocates and Economists in France, then Minister of Agriculture and Commerce, he caused an account of my system of Economics to be drawn up by M. Richelot, one of the chiefs of departments in his Ministry, under the title of *Une Revolution en Economic Politique : exposé des doctrines de M. MacLeod* which he directed to be distributed to all the Chambers of Commerce in France. This work recognized that I had made a complete revolution in Economics.

M. Jules Duval, a distinguished advocate and Editor of the *Economiste Français*, acknowledged that my *Dictionary* was superior to the French Dictionary, which was the work of 38 French Economists, and said that I ought to be recognised as one of the fathers of Economics, because I had introduced Negative Quantities into Economics, perfectly analogous to Negative Quantities in mathematics and physical science.

In 1867 the Government appointed a Royal Commission to prepare a Digest of the Law in anticipation of the fusion of Law and Equity then contemplated. They selected three branches of the Law to commence with, as specimens of the Digest of the whole Law. One of the subjects selected was Bills of Exchange, Bank Notes, &c. And they invited members of the Bar to compete to prepare these Digests under their supervision. Having studied Mercantile Law under so able a master as Mr. Bullen, I was well acquainted with the doctrines on Credit then currently held by the Courts of Law; but I was also conversant with practical commerce and I had long seen how narrow and unfit these doctrines were for the requirements of modern commerce. I held them to be merely survivals of mediæval ignorance and barbarism, and longed for the day when the Courts would adopt a more enlightened system. But as they were held by all the Judges, and laid down in all text books I never made any effort to ascertain whether they were really true or not, as I naturally concluded that the Judges knew their own law. Moreover, it would have been utterly useless for an obscure person like myself to attempt to overthrow the doctrines held by all the Judges.

At last, however, I found that my opportunity had come. In preparing my competition paper, I investigated the history of these obnoxious doctrines, and I found, to my intense delight, that they were a pure delusion and hallucination, and had no solid foundation. I found an unbroken series of decisions of the Courts of Law for 550 years in direct contradiction of the doctrines then held by the

Courts, and that doctrines which were supposed to be the very corner-stone of the Common Law, had no existence before 1800, and were the result of a single case decided by a narrow-minded, ignorant, and bigoted Judge, in direct contradiction to the unanimous decisions of the Courts for 550 years !

In the course of preparing this competition paper, my attention was, for the first time, drawn to the *Pandects* of Justinian, and I then found that the Juridical principles of Credit which I had set forth in the article "Credit" in my *Dictionary of Political Economy*, were contained word for word at full length in the *Pandects*, and had been the Mercantile Law of Europe for 1600 years !

Upon considering all the competition papers, the Commissioners unanimously selected me to prepare the Digest of the Law of Bills of Exchange, &c. Judges and Courts of Law only declare their *opinion* of what the Law is, but I was instructed by the Commissioners to declare "the Law" upon all points. It would not be suitable to enlarge further on this subject here, which I have done elsewhere. But the Commissioners gave their approval on the points in which I had impugned the current doctrines. I was assiduously engaged on this great work for one year and nine months, when Mr. Lowe, who was one of the Commissioners, and had become Chancellor of the Exchequer, put a summary stop to the whole work, and thus my Digest was never published under the authority of the Commissioners, but they and many other Judges gave me testimonials of the highest character for the work I had done.

In 1872 I published a new and greatly augmented edition of my *Elements of Political Economy*, under the title of "*The Principles of Economical Philosophy*," in which I investigated all the fundamental concepts of Economics, and traced its history for 2000 years. I introduced into it the new doctrines of Credit, which had received the approval of the Law Digest Commissioners ; and as they were novel and startling to literary Economists, I appended the testimonials I had received from the Commissioners and Judges, so that my readers might have confidence in them.

I dedicated this work to M. Michel Chevalier, in acknowledgment of the uniform support I had received from him ; and when the work was completed, he wrote to me, "It is your work which serves me as the guide for the philosophy of all my teaching at the Collège de France." M. Chevalier proposed me as a foreign member of the Academy of Moral Sciences of the Institute of France, but he died before this could be effected.

In 1873 a case involving the doctrines on Credit I had established came before the Court of Queen's Bench, and the judgment of that Court delivered by Mr. Justice (afterwards Lord) Blackburn asserted in the strongest terms all the old doctrines which I had successfully impugned before the Law Digest Commissioners.

But in 1875 the very same doctrines were brought before the Court of Exchequer Chamber in the case of *Goodwin v. Robar* the greatest Mercantile case that ever came before the Courts, and the Court, consisting of Lord Chief Justice Cockburn, Lord Justice Lush, Lord Esher, and Lord Justice Lindley, who had my competition paper before them, unanimously decided that I was right in every particular, and that the Court of Queen's Bench was wrong in every particular, and did me the very high and unprecedented honour to recommend that my doctrines should be put in a form adapted for popular circulation, which I had already done in my *Principles of Economical Philosophy*, and have done so in other works.

Thus these doctrines were then established as Law by the Court next in jurisdiction to the House of Lords: and by the Supreme Court of Judicature Act, which came into operation in 1875, they were enacted by Statute: and so they are now actual Law. These doctrines are set forth in the articles Credit and Debt, so that readers may have implicit confidence in them.

In 1878 six great London Joint Stock Banks invited me to give a course of lectures on Credit and Banking at King's College, and in 1882, at the request of the Council of the Institute of Bankers in Scotland, I delivered a similar course at Edinburgh and Aberdeen. These lectures were attended by upwards of 700 members of Banks in England and Scotland, and I showed them that all the common notions about Banking were utterly erroneous, and satisfied them that the principles and mechanism of Banking set forth in my works were entirely correct.

In 1881 and following years, I published a new edition of my *Principles of Economical Philosophy*, greatly condensed and simplified under the name of "*Elements of Economics*." Knowing by experience, and by the work I did for the Law Digest Commissioners how utterly inadequate the training of students of Law was in Mercantile Law and practical business, and the numbers of cases I had to set aside for want of this knowledge, I brought the matter before Lord Justice Bowen, who had for many years been a firm and constant friend to me, and Mr. Justice Stephen, who gave his warmest approval to my works, two members of the Council

Legal Education, and they proposed that my *Elements of Economics* should be adopted for the training of students of Law, as this work contained the only exposition of the Juridical principles of Credit which are now Law, combined with their practical application in the business of Mercantile Credit, Banking, and the Foreign Exchanges: but the Council did not see the necessity of it.

The recent fall in the value of silver is alleged to have produced many commercial inconveniences, and in every country powerful parties have been formed to endeavour to procure an international agreement to coin gold and silver in unlimited quantities at a fixed ratio, and to make them unlimited tender at the option of the Debtor. This scheme its advocates term *Bimetallism*, and they imagine that it would cure all evils. But in this they are wholly mistaken. It is only a recrudescence of the ignorant and barbarous Economics of the fourteenth century. Every nation in Europe had attempted to maintain Bimetallism for five hundred years, and it was everywhere a hopeless failure. In my *Elements of Political Economy*, and *Dictionary of Political Economy*, I had briefly stated the reason why it had been found necessary to abandon Bimetallism, and adopt Monometallism, but I did not go very deeply into the subject, as no one expected that Bimetallism would ever be revived any more than the Ptolemaic astronomy.

But the agitation instituted by the Bimetallists and their unanswered assertions had produced considerable effect in the public mind; and, as very few persons knew the real reasons why the present system of Monometallism was established, I thought it expedient to investigate the matter fully, so that the public might understand it. This I did in my *Bimetallism*. In this work I gave a succinct but sufficiently full account of the attempts to maintain it for five hundred years, and the unanimous arguments of a series of illustrious men during the same period to show its impossibility, and how the government of every country in succession has been compelled to abandon it. I also showed that it is a vain delusion to suppose that nations can, by international agreement, maintain a fixed ratio between gold and silver coined in unlimited quantities. This work has been very successful.

ARTHUR LATHAM PERRY.

A few years after I had published my *Elements of Political Economy*, a very distinguished and popular Professor in Williams College, Massachusetts, Arthur Latham Perry, published a work under the same name. For ten or twelve years he had been retailing the usual doctrines of Smith, Ricardo, Senior, and Mill. But he grew more and more dissatisfied with them from the lack of scientific generality common to them, and could see no reason why Economical discussions should be confined to tangible commodities, and not include also personal services rendered for pay, and also credit of all kinds, and he was already coming to the conclusion that Economics was the Science of Exchanges, or of Value, when Bastiat's *Harmonies Economiques* fell in his way. He had only read a few pages of it when the whole subject was cleared up to him, and since then Economics became a new science to him. This was in 1863. He then became a complete convert to the doctrine that Economics is the Science of Exchanges, or the Theory of Value. In process of time he published his *Elements of Political Economy*.

Professor Perry begins his work—"Political Economy is the Science of Exchanges; or, what means just the same, the *Science of Value*."

In his sketch of the History of the Science he points out the strange confusion and contradictions of Smith on the meaning of Wealth, the fundamental concept of the science, and observes that he at last comes to Exchangeability as the sole essence of Wealth. He then notices the confusion and contradictions of Mill on the same word, and shows that a science cannot be founded on such contradictory foundations, and that their works are now superseded by those of what is called the Third School of Economics, of which Bastiat is the most conspicuous writer in recent times. He then points out that Say's work is infected with the fundamental error of confusing Value with Utility, as we have shown above.

Professor Perry then notices the author, and says: "His books have already changed, and cannot fail in the end to change greatly, the economic opinions of his countrymen. Till now, however, his views have found a readier acceptance in France and the United States than at home. His definition of the science is the one enforced in these pages also, namely, the Science of Exchanges. This definition is drawing to itself the most recent investigators in France, England, and America; and the scientific development of it has already put Political Economy into a new and better posture."

In considering the field of the science, Professor Perry says—"If Political Economy be the science of Exchanges, it must include in its scientific view all things whatsoever that are economically exchanged. Exchangeability will be the quality that constitutes the class of things with which the science is conversant. There is such a class of things, and accordingly it possesses the first grand conditions of a science." And he shows that the failure of Smith and Mill to construct a science of Political Economy, is due to their confusion and contradictions on the fundamental concept of the science.

Professor Perry then points out that Ethics has nothing to do with Economics—"This idea of obligation on which the science of Morals is founded, and the idea of Value, on which the science of Economy is founded, are totally distinct ideas . . . as a science it has no concern with questions of moral right . . . The grounds of Economy and Morals are independent and incommensurable . . . We locate the field of the science just where Whateley places it [as was the universal idea before Say]—'Catallactics; or, the science of Exchanges'; just where the German Kiehl puts it—'Die lehre von den Werthen'—the doctrine of Value; and just where MacLeod places it—'This definition, the science of Exchanges, or its precise equivalent, the science of Value, gives a perfectly definite field to Political Economy. Wherever Value goes this science goes, and where Value stops it stops. Political Economy is the science of Value, and nothing else.'"

Professor Perry having thus defined the field of the science, proceeds to Value. He shows, in agreement with all ancient writers, and all the Italian Economists and others, that all Value originates in human wants and desires. He entirely rejects Labour and Utility as the cause of Value, and says—"It is this reciprocal estimation (or Demand) alone that constitutes Value," remarking that there are four elements on each side which produce any change in value. That is, that the general equation of value contains eight independent variables. He says that Economics is full to a surfeit of the theoretical errors and practical blunders which have come from confounding Value with Utility.

Professor Perry is in agreement with me on all points with the exception of a few trifling dissidences. His work is an excellent outline of Economics.

Mr. Walter Bagehot, in his various works, repeatedly said that Political Economy is the Theory of Business.

STANLEY JEVONS.

We must now notice a writer whose work has attracted considerable attention.

I may remark, in the first place, that Jevons has adopted the name of Economics for the science, which I suggested instead of the clumsy name of Political Economy.

Jevons is a strenuous and zealous assertor of the doctrine that Economics is essentially a mathematical science.

"It is clear that Economics, if it is to be a science, must be a mathematical science.

"To me it seems that *our science must be mathematical simply because it deals with quantities.*

"Wherever the things treated are capable of being *greater or less* there the laws and relations must be mathematical in nature. The ordinary laws of supply and demand treat entirely of quantities of commodity demanded and supplied, and express the manner in which the quantities vary in connection with the price. In consequence of this fact, the laws are mathematical. Economists cannot alter their nature by denying them the name. Whether the mathematical laws of Economics are stated in words, or in the usual symbols x , y , z , p , q , &c., is an accident, or a matter of mere convenience."

"If in Economics we have to deal with quantities and complicated relations of quantities, we must reason mathematically; we do not render the science less mathematical by avoiding the symbols of algebra—we merely refuse to employ in a very important science, much needing every kind of assistance, that apparatus of appropriate signs which is found indispensable in other sciences."

And he pursues this argument at great length, and with admirable and undeniable illustrations, to which I give my entire assent.

In his preface he says—"The conclusion to which I am ever more clearly coming is that the only hope of attaining a true system of Economics is to fling aside once and for ever the mazy and preposterous assumptions of the Ricardian school. Our English Economists have been living in a fool's paradise."

"When at length a true system of Economics comes to be established, it will be seen that that able but wrong-headed man David Ricardo shunted the car of Economic Science on a wrong line, a line on which, however, it was further urged towards confusion by his equally able and wrong-headed admirer John Stuart Mill . . . It will be a work of labour to pick up the

fragments of a shattered science, and to start anew, but it is a work from which they must not shrink who wish to see any advance in Economic Science."

To these remarks I give my heartiest assent, and it is the very work upon which I have been assiduously engaged for more than forty years.

Jevons entirely accepts my Theory of Negative Values—"Readers of Mr. MacLeod's works are, of course, familiar with the idea of Negative Value: but it was desirable for me to show how important it really is, and how naturally it falls in with the principles of the Theory."

Jevons says—"I may here remark that all the writings of Mr. Henry Dunning MacLeod exhibit a strong tendency to mathematical treatment . . . It is not my business to criticize his ingenious views, or to determine how far he has really created a mathematical system." Jevons's hesitancy to accept my system only arose from his want of knowledge of Jurisprudence and practical business. The most distinguished French Economists, Michel Chevalier, Rouher, and Jules Duval accepted and adopted it at once, and numbers of other persons have done so since.

Before I come to examine Jevons's application of mathematics to Economics, I may observe that in consequence of his ignorance of Jurisprudence and practical business, there are large portions of Economics which are essentially mathematical, which have entirely escaped his notice. Thus he has failed to observe that the current works on Economics have entirely omitted, with a few exceptions, that colossal mass of property which is termed in law Incorporeal Wealth, amounting at the present time to scores of thousands of millions of valuable property. I have shown that every sum of money is equivalent not only to a certain quantity of material commodities or labour, but also to *the sum of the present values of an infinite series of future payments, or to an Annuity*. And these annuities are Negative Economic Quantities, exactly analogous to Negative Quantities in Mathematics and Natural Philosophy. By bringing all these various forms of annuity into Economics, I have doubled the extent of Economics, just as those did who introduced Negative Quantities into Mathematics and Natural Philosophy.

Again, mathematicians have ever since the days of Maclaurin termed Debts Negative Quantities, though they never could give any satisfactory explanation of the term, from their want of knowledge of jurisprudence. Continental Jurists also term debts Negative Quantities, and have clearly explained their meaning.

But Jevons had not the least idea of this. He had not the least idea of applying the Theory of Algebraical Signs to the exposition of the theory of mercantile credit and banking, by which they are brought under the strictest mathematical demonstration. If he had done so, he never would have conceived his Bedlamite craze that Commercial Crises and Monetary Panics are due to spots on the sun's disc and conjunctions of the planets! Commercial crises and monetary panics are due to abuses of the system of Credit, bad Banking, and bad Banking legislation.

Jevons no sooner starts upon the exposition of his system than he runs upon a fatal rock, and founders. He says: "Repeated reflection and inquiry have led me to the somewhat novel opinion that *Value depends entirely on Utility*." Now this is by no means a novel opinion. Say, while rejecting Labour as the basis of Value, has made Utility the basis of his system of Value, and many other French writers have done the same. But every sound Economist has seen that Utility cannot be made the basis of Value (VALUE). I have shown this above in discussing Say. Who can compare the Utility of a bottle of champagne, price 10s., and the Utility of a work on science or literature, also price 10s.? Aristotle and all the ancients showed that value depends upon *χρεία*, Demand, human wants and desires. The Italian Economists are unanimous on this point. The Economists expressly declared that they had nothing to do with Value in use, but only with *Value in Exchange*. Aristotle says that Value is the relation between one object and others. *Value is an affection of the mind, and not a quality of an object*. It is the Desire of the mind towards something external; either to acquire it, which is Positive Value, or to get rid of it, which is Negative Value. When Value or Desire proceeds another step, and gives something to obtain its desire, it becomes Demand. And all phenomena of Value or Exchanges arise from RECIPROCAL DEMAND. Things are only equal in value when persons desire them equally, and are willing to give the same sum to acquire them.

Just before the preceding sentence we have quoted from Jevons, he says—"As almost every Economical writer has remarked, it is in treating the simple elements that we require the most care and precision, since the least error of conception must vitiate all our deductions." This sentence is most true, and seals the condemnation of Jevons's whole work. We can at once see that all Jevons's superstructure must fall in ruins, because it is founded on a radically false concept.

Jevons abandons the plain and intelligible designation of Economics as the Science of Exchanges or of Value, or the Theory of Wealth, and adopts the fantastic title of the *Calculus of Pleasure and Pain*, and says that it is the *mechanics of utility and self interest*. Pleasure and pain are undoubtedly the ultimate objects of the Science of Economics. To satisfy our wants to the utmost with the least effort—to procure the greatest amount of what is desirable at the expense of the least that is undesirable—in other words *to increase pleasure*, is the problem of Economics.” All this is mere nonsense. Economics is simply the science which treats of “the principles and mechanism of universal commerce.”

It is quite impossible to enter into the weary waste of mathematics which Jevons has introduced into the Theory of Utility and of Exchange, because, as they are based upon a radically false concept, they are utterly worthless; and even if they were true, they are equally useless. Instead of restricting himself to the statement of a general law in simple words, which would be essentially mathematical, he dazes us with a flood of Differential Equations! I told you that if such methods were to be adopted, it would be necessary to employ a steersman, every time he shifted the helm to alter the course of the vessel, to solve a Differential Equation, to find out how much the helm ought to shift it to produce the required effect; or for the directors of the Bank of England, every time they raised or lowered the rate of discount to solve a Differential Equation, to determine how much they ought to raise or lower it to produce the required effect.

Jevons then applies his fatuous Differential Equations to the Theory of Labour, of Rent, and of Capital. He says that the Theory of Rent has been accepted by English writers for nearly a century, and then he cites Anderson's theory of Rent. But in this he is quite mistaken. It is not Anderson's theory of Rent, but Malthus's, which has till lately been accepted by English writers—though it is utterly rejected by the most distinguished foreign economists. Anderson's and Ricardo's theories of Rent are the inverse of each other.

But the fact is that neither Ricardo, nor Jevons, nor any literary economists, had any idea of the real meaning of the word Rent, and would have at once dissipated all these silly theories of Rent. Had Jevons any idea of the true definition of Capital.

However, I am in entire agreement with Jevons's last paragraphs on the “Noxious Influence of Authority.” “There is ever a tendency of the most hurtful kind to allow opinions to crystallise

into creeds. Especially does this tendency manifest itself when some eminent author, enjoying power of clear and comprehensive exposition, becomes recognised as an authority. His works may perhaps, be the best which are extant upon the subject in question; they may combine more truth with less error than we can elsewhere meet. But to err is human, and the best works should ever be open to criticism. If, instead of welcoming inquiry and criticism, the admirers of a great author accept his writings as authoritative both in their excellencies and their defects, the most serious injury is done to truth. In matters of philosophy and science authority has ever been the great opponent of truth. A despotic calm is usually the triumph of error." "In science and philosophy nothing must be held sacred." "I protest against deference for any man, whether John Stuart Mill, or Adam Smith, or Aristotle, be it allowed to check inquiry. Our Science has become far too much a stagnant one, in which opinions, rather than experience and reason are appealed to." To all these remarks we give our heartiest assent.

We do not think it necessary to cite any more authors, because the purpose of this work is not to be a catalogue of writers in Economics, but it is a History of Ideas in Economics. And we have shown that the original concept of Economics was that it is the science of Commerce or Exchanges, or the Theory of Value. And after the temporary dislocation of the science by Say and Mill, all distinguished writers have come back to that conclusion. The general Economical system of Say and Mill is now as dead as a dodo.

But as Economics is the Theory of Value, it is necessarily a mathematical science, just as the Theories of Force, of Light, Heat, of Electricity, &c., are mathematical sciences. Many writers, who perhaps may be able mathematicians, have attempted to make it so; but their attempts have been utterly rash and premature. They never seem to have remembered that in every physical science the first thing done was to collect the facts, and then to apply mathematics to these facts. But mathematicians have attempted to make Economics a mathematical science, without the least attempt to make themselves acquainted with the elementary facts. They have imagined that they could evolve the most complex branch of human knowledge out of their own inner consciousness. Bagehot rightly designates Economics as the *Theory of Business*; therefore of course, the details of business are the phenomena of Economics. No doubt many writers on Economics have been very able and ingenious men, but they have neglected the very first aphorism of

Bacon—"Man, the servant and interpreter of Nature, can do and understand so much, and so much only, as he has observed in fact or in thought of the course of Nature," and "neither the naked hand nor the understanding left to itself can do much. It is by instruments and helps that the work is done, which are as much wanted for the understanding as for the hand."

Economics is, no doubt, a mathematical science, but mathematics only comes in in the third place, as in all physical science. We must first have a sound philosophy of the subject, before we apply mathematics to it. Economics is primarily a juridical science, because it deals with *property* of all sorts. It requires a knowledge of the most subtle branches of law, to determine what an Economic Quantity is. Secondly, it requires a thorough knowledge of the mechanism of commerce, to know how these Economic Quantities are exchanged with each other; and then, thirdly and lastly, it requires an adequate knowledge of mathematics and physical science to know how to bring the laws which govern the relations of these Economic quantities into harmony with the laws of the other physical sciences.

Now writers on Economics have almost entirely neglected the first two of these branches of the subject, and therefore they never had any solid foundations whereon to rear up a constructive science, and therefore they may be called Scholastic Economists, and therefore their whole structure has fallen in ruins, just as the Physics of the Schoolmen did.

Economics is a Physical Science.

Having now got a clear and distinct conception of the Science of Economics, we see at once how it is a Physical Science. One of the most distinguished physical philosophers of the present day expressed to me a doubt that Economics can be made a Physical Science. But that all depends on its fundamental conception and definition. So long as it was termed the "Production, Distribution, and Consumption of Wealth," there was nothing in the name or the nature of the subject to suggest any resemblance to a Physical Science. But as soon as we revert to the alternative and equivalent definition of the science as the Science of Exchanges, or Commerce, we perceive at once how it is a Physical Science. Because there being *Three* orders of Exchangeable Quantities, and therefore *six* species of Exchanges, the object of the Science is to determine the *Laws of the phenomena* of these Exchanges—that is to determine

the Laws which govern the changes in their numerical relations. Hence we have a new order of Variable Quantities; and the Laws which govern this new order of Variable Quantities must be in strict harmony with the laws which govern the relations of Variable Quantities in general. The laws which govern the variable relations of Economic Quantities must be in strict harmony with the laws which govern the varying relations of the stars in their courses.

We have then a distinct body of phenomena, all based upon a single concept, or idea, and therefore fitted to form a great demonstrative science of the same rank as Mechanics, or Optics, or any other Physical Science.

Another great body of particulars is won from the vague, floating, and uncertain mass of knowledge, won from the void and formless infinite, and fixed and circumscribed by a definition, and formed into a great Inductive Science, whose investigations must be governed by the same general principles of Inductive Logic, as others are, and yet will be found to contribute its quota to Inductive Logic, bearing a general similarity to its sister sciences, and yet with peculiarities of its own—

Facies non omnibus una nec diversa tamen: qualis decet esse scrorum.

And as quantities of such diverse natures as men, cattle, the wind, gravitation, gunpowder, steam, electricity, &c., are all included in the science of dynamics, because they all exert force, whose effects can be measured numerically, and dynamics regards them simply as forces, wholly irrespective of any other qualities they may possess; so we see how Quantities of such diverse natures as money, lands, houses, debts, labour, copyrights, cattle, the funds, sciences, clothes, and rights of all sorts, are all included in the science of Economics, because they all possess the Quality of **Exchangeability**, or the capability of being bought and sold, or exchanged; and the Value of all of them may be measured in money, and Economics regards them solely in regard to this Quality, wholly irrespective of any other Qualities they may possess. Thus we see the true field of the science; an Economist is one who reasons about the Laws of Value.

It is now universally admitted that Economics is to be constructed on principles analogous to those of a physical science. Now Astronomy is the Physical Science which is the type of Economics. The fundamental problem in Economics is exactly the same as the fundamental problem in Astronomy. The Astronomer

sees a number of Quantities, the heavenly bodies, moving in all sorts of directions—sometimes advancing, sometimes apparently stationary, sometimes retrograding—and his object is to discover a single General Law which accounts for, and governs, all these varying relations. So the Economist sees a multitude of Quantities constantly changing their numerical relations to each other, and his object is to discover a single **General Law** which governs all these varying relations. Like Astronomy, Economics is a pure science of ratios.

And the analogy between Astronomy and Economics may be still further shown. Some persons say that it is not sufficient to say that Value originates in Demand; but that the Economist should go further, and investigate the cause of Demand. But that would be a great error. It would introduce the whole of Psychology into Economics. An Economist, *quà* Economist, has no more to do with the causes which produce Demand than an Astronomer, *quà* Astronomer, has to do with the cause of gravitation. So, also, an Economist, *quà* Economist, has no more to do with the processes of agriculture and manufactures than the Astronomer, *quà* Astronomer, has to do with the methods by which the heavenly bodies were formed. The Astronomer finds his Force, which is Gravitation, and certain material bodies upon which it acts; the Economist finds his Forces, which are Demand, and certain quantities, which are the Supply. The business of the Astronomer is to determine the *Laws of the phenomena* of the motions of the heavenly bodies, in their varying relations to each other under the action of the Law of Gravitation: that defines and limits his science. The business of the Economist is to determine the *Laws of the phenomena* of Exchanges, or the varying relations of Economic Quantities under the action of Lord Lauderdale's Law of Value (**Value**): that defines and limits his science: each is a pure science of Variable Quantities, or Ratios.

Thus, Economics is to the phenomena of Exchanges, or of Commerce, precisely what Dynamics is to the phenomena of Force, or Optics is to the phenomena of Light: and so on of the other physical sciences. Economics is simply the **Theory of Value**, which, next to civil government, is the most important thing in human affairs.

Thus it is clearly seen that Economics is a Physical Science: but it is also a Moral Science; because it is based upon the *mores*—the $\eta\theta\eta$ —of men. For we find that the general laws of Exchange, or the principles of Commerce, hold good among all

nations, among the rudest and most civilised, in all ages and countries. The laws of commerce are identically the same to-day as they were when commerce first sprung into being, and they will remain the same to the end of time. We find that the same causes are invariably followed by the same effects; and that is the reason why Economics may be raised to the rank of an exact science: a permanent and universal science of the same nature as the Physical Sciences.

“The Laws of Commerce,” said Edmund Burke, “are the Laws of Nature, and therefore the Laws of God.” That is why Economics is a Physical Science; because it is based upon principles of human nature which are as universal and permanent as the qualities of the physical substances upon which the physical sciences are based. And, therefore, Economics is a Physical Moral Science, and the only Moral Science which is capable of being raised to the rank of an exact science.

On the best Name for the Science.

Having thus got a clear and distinct Science, the next thing is to consider and determine what is the best name for it. We have shown how the term Political Economy became attached to the Science of Exchanges, or Commerce, or of the “Production, Distribution, and Consumption of Wealth.” But all Economists are now anxious to get rid of this term as cumbrous and misleading, and various other designations have been proposed. Whately proposed **Catallactics**: others have proposed *Plutology*, or *Chrematology*. These and various other names which have been proposed, are not in themselves objectionable, and if the Science had been a new creation, might perhaps have been adopted. But under present circumstances, these changes are far too violent to be adopted. What chance would there be of the public accepting, as the designation of the cultivators of a Science, the term Catallacticians, or Plutologists, or Chrematologists? The name by which a Science is called is of small importance: the real requisite is, that its nature and objects should be clearly defined. There is no advantage to be gained by changing the name of the Science which has once acquired a firm hold in popular usage, even though that name might not have been the best, that might have been the best if the Science had been a new creation.

There are few Sciences which have not undergone a great extension, or alteration, of what the meaning of their names would

suggest. Plato, long ago, laughed at the idea of calling the Science which treats of the motion of the heavenly bodies, Geometry. Yet Geometry has retained its name from that day to this; and the French call a great analyst a great Geometer. Trigonometry has long extended beyond the measuring of triangles. Who could tell what Chemistry or Electricity meant by their names? In ancient times Music meant all the liberal studies: in modern times it is restricted to the modulation of sounds.

The name of Political Economy, or Economic Science, is so firmly rooted in the public mind that no advantage could be got by changing it: and furthermore, there is no reason for changing it, as the true character of the Science is expressed in its very name. It is often supposed that οἶκος in Greek means a house, and that an Economist is the master of a house. But οἶκος has a far more extensive meaning in Greek than that of a house only. Throughout the whole range of Greek literature, from Homer to Ammonius, οἶκος means Property, or Estate, of every description. Thus, not only houses, lands, money, corn, timber, jewels, &c., are a man's οἶκος: but also all such property as Bank Notes, Bills of Exchange, the Funds, Shares in Commercial Companies, Copyrights, Patents, &c., &c.

Thus Homer says,

κατέδουσι βιαίως
οἶκον Ὀδυσσῆος, τὸν δ' οὐκέτι φασὶ νέεσθαι

"They forcibly devour the substance of Ulysses, who they say will never return."

Also, ἐσθίεται μοι οἶκος

"My Property is being devoured."

In the Odyssey, οἶκος is used in numerous passages as synonymous with χρήμα and βίος.

Herodotus says: καὶ οἶκον τοῦ πατρὸς διαφορηθέντα.

"And the Property of your father wasted away."

Demosthenes says—οἶκοι διπλάσιοι καὶ τριπλάσιοι γεγόνασι.

"Their fortunes have doubled and tripled."

In the Economics of Xenophon, Socrates expressly points out the distinction between οἶκος and οἰκία, the latter being the house only, and the former all a man's substance, or estate. But in later times, οἰκία also acquired this extended meaning, it occurs so in the New Testament.

So Ammonius says : οἶκος λέγεται ἡ πᾶσα οὐσία.

"οἶκος means all Property."

οἶκος was the technical term in Attic Law, to denote a man's whole substance or estate.

Hence Economics is the most apt and fitting term which could be chosen to denote the science which treats of the Exchange of property. Moreover, the Economists called their science "Economical Philosophy": and Condillac expressly defined "Economic Science" or "Economics" to be the science of commerce.

Hence we do not propose to make any change at all in the name of the science. Both of the terms, "Political Economy" and "Economic Science," are in common use, and it is better to discontinue that name which is liable to misconstruction, and which seems to relate to politics, and to adhere to that one which most clearly defines its nature and extent, as relating only to Property, and is most analogous to the nature of other sciences. Long ago we suggested that **Economics** is the most suitable name of the science, and this name has now been very generally adopted.

Economics is, then, simply the Science of Exchanges, of commerce, in its widest extent, and in all its forms and varieties, it treats of Exchanges—all Exchanges—and nothing but Exchanges.

The definition of the Science which we offer is :

Economics is the science which treats of the Laws which govern the relations of Exchangeable Quantities.

And the late distinguished Economist, M. Michel Chevalier, does us the honour to say that in his opinion this is the best definition of the Science which has been proposed.

Economics as a Liberal Science.

Some idiot nick-named Economics the "dismal science." It would be impossible to conceive a more complete misnomer. Economics is the Queen of all sciences, it is in itself a complete liberal education.

To comprehend Economics it is indispensable to have :

1. An adequate knowledge of Latin and Greek, so as to read the classical writers in the original : because they abound in notices of Economical questions, and they contain most of the fundamental concepts of Economics.

2. But a mere knowledge of classical Latin and Greek is not sufficient, it is necessary to have a knowledge of Juridical Latin and Greek, because in the *Pandects* of Justinian and the *Basilica*, which are the sources of our Mercantile Law, there is a class of words which, in classical Latin and Greek, mean material commodities, but in Juridical Latin and Greek, and in modern Mercantile Law, mean only abstract Rights and Duties.

3. A general knowledge of the Law of Property, because Economics deals with property of every description.

4. But modern Commerce is carried on almost exclusively by **Credit**, consequently it is necessary to have a thorough knowledge of the Juridical principles of Credit, the most abstruse and profound branch of Mercantile Law.

5. A thorough knowledge of the principles and mechanism of Commerce, both agricultural and mercantile.

6. A thorough knowledge of the principles of Natural Philosophy and modern Algebra, and the capacity of seeing how they are to be applied to the phenomena of Economics.

7. A knowledge of the history of all nations, because it supplies the materials for Economics.

There are numberless Mercantile Lawyers who are perfectly well versed in special points of Mercantile Law, but very few have any knowledge of the actual mechanism of Commerce.

There are multitudes of Bankers who have a perfect knowledge of practical business, but who were never trained in the abstruse principles of Mercantile Law on which their business is based.

Some Mathematicians have attempted to apply mathematics to Economics; but as they never had the slightest knowledge of Mercantile Law nor of practical business, their attempts are mere midsummer madness.

And those who have undertaken to write general treatises on Economics never had the slightest knowledge of Mercantile Law, nor of practical business, nor had the faintest knowledge of the fundamental principles of Natural Philosophy, nor how to apply them to the phenomena of Economics.

Every science is greater than any of its cultivators. Astronomy is greater than Hipparchus, than Ptolemy, than Copernicus, than Kepler, greater even than Newton himself. So Economics is greater than Turgot, than Quesnay, than Smith, than Ricardo, than Say, than Mill.

To every one who has done good service let us pay rational

respect, but not abject idolatry. He who studies Philosophy must be a freeman in mind. No one, however eminent, is permitted to be a despot in science, and chain up the human intellect, or arrest the progress of thought.

Economics is the noblest and grandest creation of the human intellect. It is the crown and the glory of the Baconian Philosophy. No one can thoroughly realise the awful sublimity of the genius of Bacon until he studies Economics, because it is the logical realisation of his matchless discovery that the same principles of Mathematical and Physical Science which govern the phenomena of nature equally govern the practical business of life.

Time's noblest offspring is its last.

Book II.

THE FUNDAMENTAL CONCEPTS AND AXIOMS
OF ECONOMICS

ACCEPTILATION—RELEASE.

ἀθώωσις.

Acceptilation is the Release or Discharge from a debt.

In Roman law, when a debtor came to repay a loan, he brought the money to his creditor and said something of this sort to him :

“Quod ego tibi promisi, habesne acceptum?”

“*Have you received what I promised you?*”

To which the creditor replied :

“Habes acceptumque tuli.”

“*You have, and I have entered it as received.*”

In this case the Debtor made an entry of money paid in his ledger, termed **Expensilatio** : and the Creditor made an entry of money received in his ledger, termed **Acceptilatio**.

These entries of *Expensilatio* and *Acceptilatio*, when once made in their respective ledgers by the parties, were final and conclusive, and could not be questioned.

All Contracts, or Obligations, created by the mutual consent of parties, may be cancelled, extinguished, dissolved, and annihilated by the same mutual consent of the parties by which they were created.

As Gaius says (*Dig.* 50, 17, 100), “Omnia quæ jure contrahuntur contrario jure pereunt.”

“*All legal contracts are destroyed by a reverse process.*”

Consequently, if for any reason whatever the Creditor chose to release the Debtor from his Debt without the actual payment of money, it was done by the solemn form of *Acceptilatio*.

The Debtor went through the legal form of question, and the Creditor went through the legal form of answer, and then made the formal entry of *Acceptilatio* in his ledger : it was then a valid and final release, and it could not be questioned or disputed.

So at present, if a Creditor gives his Debtor a formal written receipt for money due, or hands back to him his Promissory Note, it is a valid and final release of the debt.

The Release of a Debt is in all cases Equivalent to a Gift or Payment of Money.

Euler says that if a person has nothing and owes 50 crowns, his property is 50 crowns *less* than nothing. His property is -50 crowns, *i.e.*, he is under the duty to pay 50 crowns, and he has nothing to pay them with. He then says that if any person made the Debtor a present of 50 crowns to pay his Debt with, he would be 50 crowns richer than he was before, though his property would then be 0.

Euler is right so far as he goes ; but he has only stated one half of the case, because the same result may be attained in another way.

As the same result follows whoever gives him the money, we may suppose that his Creditor makes him a gift of 50 crowns ; and so he discharges his Debt. The Debtor is now 50 crowns richer than he was before, and his property is now 0.

But the same result may be attained in another way.

Suppose that instead of the double operation of the Creditor giving his Debtor 50 crowns, and then receiving them back again in discharge of his Debt, he simply *Releases the Debtor from his Debt*, then the Debtor would be 50 crowns richer than before, and his property would be 0.

This example shows that the *Release of a Debt* is in all cases whatever equivalent to the *Gift, or Payment, of Money*, a principle of the most momentous consequence in modern commerce.

Now, if Money be Positive, $+$, a Gift, or Payment, is also $+$, and the Gift or Payment of Money is $+\times +$, which equals $+$.

And if a Debt be Negative, $-$, to take away or Release is also $-$. Hence, Releasing or Cancelling a Debt is $-\times -$, which also equals $+$.

Hence Releasing a Debt is absolutely equivalent to making a Gift of Money.

The doctrine that $-\times - = +\times +$ is absolutely true in Economics as it is in all branches of Science, both mathematical and physical ; and its interpretation in Economics is this :

The Release of a Debt is in all cases whatever Equivalent to the Gift or Payment of Money.

So Paulus says (*Dig.* 50, 17, 115): "Si quis obligatione liberatus est, potest videri cepisse."

Basilica, II., 3, 115: "ὁ ἐλευθερούμενος ἐνοχῆς δοκεῖ τι εἰληφέναι."

"He who is Released from an Obligation has gained."

So also: "Per accepti quoque lationem egens debitor etiam eam pecuniam quâ liberatus est, cepisse videtur."

"Even an insolvent Debtor, being freed by a Release, has gained the amount of what he is released from."

So Pothier says (*Traité des Obligations*): "A Release is a donation."

So Ortolan says (*Explication historique des Inst. Just.* liv. ii. tit. 7, § 543, 547): "The Release from a Debt is always classed as a donation in Roman Law."

So Von Savigny says (*Traité de droit Romain*, liv. ii. ch. 3, § 142): "A simple contract, or the Release from a Debt, may be the subject of a donation."

Also (*ibid.* § 155): "The increase of wealth may result from . . . a Credit given to the Debtor, or the Release of a Debt."

"Every Release of a Debt enriches a Debtor. The amount of the donation is always equal to that of the Debt, even though the Debtor is insolvent. Although the Release from a Debt destined never to be paid seems a thing of no consequence, the increase of property does not the less exist. In effect, not only does Property represent a quantity always indeterminate, but its total value may also be either *Positive* or *Negative*. [Negative property is the inverse of a Right; *i.e.* a Debt or a Duty.] If, then, property is reduced to a Negative Value, the diminution of *minus* is in law a change identical with the increase of *plus* for a Positive Value" (that is, $- \times - = + \times +$).

"The Release of a Debt always constitutes a Gift equal to the amount of the Debt, even though the Debtor is insolvent." (*Ibid.* § 166.)

"So the Release of a Debt to a Debtor may be a Legacy." (*Dig.* 34, 3, 3.)

Application of the Principles of Algebra and Mercantile Law to Commerce.

It has now to be shown how the Algebraical doctrine that $- \times - = + \times +$, and its legal interpretation that the Release of a Debt is in all cases equivalent to a Payment in Money, are applied in commerce.

Suppose that I owe £100 to a banker, in how many ways can I pay him?

1. I may pay him in actual money; that is, $+ \times +$.
2. If I happen to possess £100 in his Notes, I may tender him his own Notes; or if I have an account with him, I may give him a

Cheque on my account; that is, in either case I release him from his Debt to me; that is, $- \times -$.

That is, releasing him from his Debt to me is paying my Debt to him.

3. I may pay him £50 in Money and £50 in his own Notes, or give him a Cheque for £50 on my account, and the combined effect of the two is to discharge and extinguish my Debt of £100 to him.

Thus I may pay a Debt to my banker wholly in Money, or wholly by releasing him from his Debt to me, or partly in Money and partly by releasing him from his Debt to me, and the effect of these several modes of payment is absolutely identical.

Thus it is seen that the doctrine that taking away a Negative Quantity is equivalent to adding a Positive Quantity is absolutely true in all branches of science.

Thus, in all sciences whatever, $- \times - = + \times +$, and in Mercantile Algebra it is to be interpreted thus $-$.

The Release of a Debt is, in all cases whatever, equivalent to the Gift or Payment in Money.

The Release of a Debt may be held to extinguish an Obligation in Three different ways.

There are three different methods in which the Release of a Debt may be held to extinguish an Obligation.

First Method. — As the Obligation was created by the mutual consent of the parties, so it may be cancelled and extinguished by the same mutual consent which called it into existence.

Now, by the general principles of the theory of Algebraical Signs, to create an Obligation is denoted by $+ \left\{ \begin{array}{l} + \text{£}100 \\ - \text{£}100 \end{array} \right\}$

So to cancel, extinguish, or annihilate an Obligation is denoted by $- \left\{ \begin{array}{l} + \text{£}100 \\ - \text{£}100 \end{array} \right\}$

Now let us observe the effect of the Negative Sign on each of the parties to the Obligation.

The Creditor's property becomes $-(+ \text{£}100)$.

But $-(+ \text{£}100) = - \text{£}100$.

That is, the Creditor has *lost* £100.

The Debtor's property becomes $-(- \text{£}100)$.

But $-(- \text{£}100) = + \text{£}100$.

That is, the Debtor has *gained* £100. Which shows that to Cancel, or Release, a Debt is exactly equivalent to making a Gift of Money.

Second Method.—As the Creditor's Right of Action is simply a piece of Merchandise, Goods, and Chattels, or a Commodity, it may be the subject of a Donation or Gift exactly like any other Commodity.

The Creditor may present his Right of Action as a Donation or Gift to the Debtor himself.

Then the Debtor has the Right to demand (+ £100) from himself, and also the Duty to pay (− £100) to himself.

Then his property will be + £100 − £100.

These two quantities cancel and extinguish each other, like + *a* and − *a* on the same side of an equation. They vanish together; the Right is not suspended or in abeyance, it is absolutely extinguished. The (+ £100) ceases to exist as well as the (− £100), and thus the Obligation is absolutely extinguished.

The Creditor has lost £100, and the Debtor has gained £100.

Thus, if a person makes another a Gift of £100, and also releases him from a Debt of £100, the Donee has received a Gift of £200.

When Sir Joshua Reynolds died, he held a Bond of Burke's for £2000. By his will, he bequeathed Burke £2000 in Money, and also released Burke from his Bond for £2000. Consequently, Reynolds bequeathed £4000 to Burke.

Third Method.—There is still a third method by which it can be explained.

When a Debtor is presented with a Right of Action against himself, he fulfils two *personæ*, or characters. He is, at the same time, Creditor to himself and Debtor to himself.

In his *persona* of Creditor he presents his Right of Action for payment to himself in his *persona* of Debtor. In his *persona* of Debtor he pays the Right of Action to himself in his *persona* of Creditor. He has thus fulfilled and discharged his duty just as much as if he had paid it to another individual.

Or in his *persona* of Creditor he agrees with himself in his *persona* of Debtor to cancel and extinguish the Obligation. The Obligation is then extinguished and annihilated, exactly in the same manner as if the Creditor and the Debtor had been separate individuals.

Thus the Obligation is not merely suspended or in abeyance; it is absolutely cancelled and extinguished, and ceases to exist.

When + £100 Cancels and Extinguishes - £100, and when it does not.

It must, however, be carefully observed that (+ £100) and (- £100) in the same person do not always and necessarily cancel and extinguish each other in Economics.

A person's property may be (+ £100) and (- £100), and, therefore, for practical purposes, equal 0; and yet these two quantities will not cancel and extinguish each other.

It is only when the Right to demand (+ £100) from *himself* and the Duty to pay (- £100) to *himself* unite in the same person, that these two quantities cancel and extinguish each other and vanish, and the Contract, or Obligation, is extinguished.

Suppose that a person has £100 in gold or notes, and at the same time owes £100 to someone else.

Then his property will be (+ £100) and (- £100), and in substance = 0.

But in this case the (+ £100) will not cancel the (- £100), and the (+ £100) is not extinguished as an Economic Quantity.

The reason of this is obvious, because his possession of £100 in gold, or his Right of action against A, is no fulfilment of his Duty to pay B.

The Debtor may pay away his gold or the £100 in notes, and leave his own Debt to B unpaid.

Suppose that two bankers each hold £100 of each other's notes. Then, so far as regards these notes, the property of each banker is (+ £100) and (- £100), and in substance = 0.

But in this case the (+ £100) and the (- £100) held by each banker do not cancel each other, because each banker may pay away the notes of the other in commerce, and there are £200 of Economic Quantities in existence. Each banker has the positive absolute Right to demand £100, which is his actual property; but he is only under the contingent Duty to pay £100 if demanded.

If, however, they exchange notes, each banker will then have the Right to demand £100 from *himself*, and the Duty to pay £100 to *himself*. And each of the Obligations is simultaneously extinguished, because each banker has performed his Duty of paying the other by releasing him from his Debt. Then the £200 of Economic Quantities are extinguished, and vanish out of existence.

Hence it is only when the Right and the Duty emanate from the

same person, and are again re-united in the same person from whom they emanated, that the (+ £100) and the (− £100) cancel each other, and the Obligation is extinguished.

How Joint Stock Banks Increase their Capital by Acceptilation.

We shall now give an example of the doctrine that the Release of a Debt is in all cases equivalent to a Payment in money, which may surprise some of our readers, and of which we have not seen the slightest notice anywhere else.

When it is published to the world that the Bank of England has a paid-up Capital of £14,000,000, and that several of the Joint Stock Banks have paid-up Capitals of several millions, most persons take it for granted that the Banks have these sums paid-up in hard cash.

Nevertheless, this is a profound error. Of course, it is impossible for any outsider to have any precise knowledge as to how much of these amounts was ever paid-up in actual money. But it may probably be said with safety, that not so much as one-half of these various amounts was ever paid-up in real money, but by another method, which we have now to describe. And it will be seen that probably the greater portion of these millions of Capital was never anything more than the Bank's own Credit turned into Capital.

To explain this, we may observe that the first subscription to the Bank of England was £1,200,000, which was, of course, paid up in money. It was advanced to Government, and the Bank was allowed to issue an equal amount in Notes, which were, of course, an augmentation of the Currency.

In 1696 the Bank stopped payment, and its Notes fell to a discount of 20 per cent.

In 1697 Parliament undertook the restoration of public credit, and it was determined to increase its Capital by £1,000,000. *But not one penny of this was paid up in actual money.*

The Act directed that £800,000 of the subscription should be paid-up in Exchequer tallies or Exchequer bills, *and the remaining £200,000 in the Bank's own depreciated Notes, which were received at their full value as Cash.*

Thus, of its first increase of Capital, £200,000 consisted of its own depreciated Notes. The Bank was authorised to issue an additional amount of Notes equal to its increase of Capital. At subsequent increases of Capital, the subscribers might always pay

up any amount they pleased in the Bank's own Notes, which were held as equivalent to a payment in money, and an increase of Capital. Thus, the release of the Bank from payment of its Notes was held to be an increase of its Capital.

In 1727 the Bank of Scotland increased its Capital. The subscription was partly paid-up in the Bank's own Notes. An outcry was raised against this. But the Directors justly answered: "But the objectors do not all consider this point, for the payments are many of them made in specie; and Bank Notes are justly reckoned the same as specie when paid in on a call of stock, *because when paid in it lessens the demand on the Bank.*"

Hence, the Directors clearly understood that the *Release of a Debt* is in all respects equivalent to a *Payment in money*.

The Bank had issued its Notes, and was, of course, Debtor to the holders of them. These Debts were Negative Quantities, or Liabilities to pay. The subscribers might either pay in specie, that was $+ \times +$, or Release the Bank from its Debt to them, that was $- \times -$, and the effect of either transaction was exactly the same. At every increase of Capital the same operations would be repeated; payments in Money and in the Bank's own Notes would always be treated as equivalent. And hence at every increase of Capital, a certain amount of the Bank's own **Temporary Credit** would be turned into **Permanent Capital**.

Thus we see that the Parliament of England, and the Directors of the Bank of Scotland, who were probably equally innocent of Roman Law and Algebra, simply from their own mercantile instinct treated the *Release of a Debt* as in all respects equivalent to a *Payment in Money*, or they recognised that in Commerce $- \times - = + \times +$.

Banks, therefore, which issue Notes may increase their Capital by receiving them in payment. But Banks which do not issue Notes may increase their Capital exactly in the same way. A customer of the Bank who has a balance at his Credit, is in exactly the same position as a noteholder. If he wishes to subscribe to an increase of Capital, he simply gives the Bank a cheque on his account. That is equally a Release to the Bank from a Debt as a payment in the Bank's own Notes, and an increase of Capital.

If the customer has not sufficient funds on his account to pay for the stock he requires, he may bring the Bank bills to discount. The Bank discounts these bills by creating a Credit or Deposit in his favour, which is, of course, a Negative Quantity, or a Debt, exactly like a Bank-note. The customer then gives the Bank a cheque on

his account ; that is, he Releases the Bank from the Debt which it has just created in his favour, and that Debt released, then becomes an increase of Capital.

This is the way in which the Capital of all Joint Stock Banks is increased. And it may go on to any extent without any payment in money. And, consequently, it is wholly impossible for anyone who has not had access to the books of the Bank to ascertain what proportion of its Capital consists of payment in Money, and what proportion consists of the Bank's own **Temporary Credit** turned into **Permanent Capital**.

ACCOMMODATION PAPER.

Bills of Exchange are usually considered to have arisen out of past transactions. The merchant having sold his goods to the trader for a Right of Action, Credit, or Debt, he may sell this Debt to his banker. If the banker discounts the bill, he has two names as securities : first, the acceptor of the bill, or the buyer of the goods, who is the Debtor primarily responsible, or the principal debtor, as he is called ; and, secondly, his own customer, who indorses the bill to him, and so becomes security that if the principal debtor does not pay the bill, he will.

But banking Credits may be created to effect future transactions, as well as to buy Debts created by past transactions.

Suppose, that a merchant wishes to effect a purchase, he may request his banker to discount his Promissory Note, so as to obtain a Credit to effect his purchase. But the banker may say to him that it is against his rules to discount any instrument containing only one name ; but that if he can get any responsible friend to stand security for him by indorsing his Note, he will discount it for him. Suppose, then, that his friend joins with him, without having received any consideration in indorsing the Note, such an instrument would be an **Accommodation Note**.

And when any person puts his name on a bill, either as drawer, acceptor, or indorser, and so stands security for its payment, without having received any consideration for so doing, it is termed an **Accommodation Bill**.

The banker, now having two names on the instrument, discounts it, and the merchant, having now a Credit on his account, purchases goods, the proceeds from the sale of which are intended to meet the bill when it becomes due.

Now, it is evident that the security of this bill, which is an Accommodation Bill, is exactly the same as if it had been a real bill, or one founded on a preceding transaction.

What difference can it make whether a bill, which arose out of a *past* transaction, is sold for a Banking Credit, and the goods are sold to meet the bill, or a bill is sold for a Banking Credit, and goods are purchased with it to meet the bill? The practical effect is that B stands security to the Bank for the advance made to A, and what is there in the nature of such a transaction anything worse than for one man to stand security for another in any commercial transaction?

A great deal has been said and written about the difference between Real and Accommodation Bills; and while no terms of admiration are too strong for the first, no terms of vituperation are too strong for the latter. Thus Mr. Bell says, "The difference between a genuine commercial bill and an accommodation bill is something similar to the difference between a genuine coin and a counterfeit one"; as if the fact of negotiating an Accommodation Bill were in itself one of moral turpitude.

It is generally assumed that real bills possess some sort of security, because it is supposed that there is Property to represent them. Such an idea is not uncommon among scholastic Economists, but it is utterly fallacious. As we have pointed out (**Bill of Exchange**), Real and Accommodation Bills have exactly the same security; they are simply claims against the persons of the obligants, which they are liable to make good out of their whole estates. The bills are no title or claim to the goods which have been purchased with them. The objection, therefore, to Accommodation Bills on that ground is futile.

The essential distinction between Real and Accommodation Bills is that one represents *past* transactions and the other *future* transactions. In a Real Bill, goods *have been* purchased to meet the bill; in an Accommodation Bill, goods *are to be* purchased to meet the bill. But this is no ground of preference of one over the other. A transaction which *has been* done may be just as wild, foolish, and absurd as one which *has to be* done. The intention of engaging in any mercantile transaction is that the result should repay the outlay with a profit. There is no other test but this of its propriety in a mercantile sense.

The common objections against Accommodation Paper are, therefore, quite futile, and wide of the mark; and the proof of it is that what was, until quite recently, the largest, safest, and most profitable

part of Scotch banking is entirely of the nature of Accommodation Paper.

The system of Accommodation Paper is one of immense importance in modern commerce, and the abuses of one kind of it have contributed to produce the greatest calamities. We must, therefore, examine more closely this species of Accommodation Paper, which, having been abused by unscrupulous persons for fraudulent purposes, has produced the most frightful mercantile convulsions; and we must point out wherein the danger and the fraud of this particular species of Accommodation Paper consist.

Explanation of the Real Danger of Accommodation Paper.

(Quoted by Mr. Commissioner Holroyd in his judgment in re Laurence, Mortimer, and Schrader.—“Standard,” March 7th 1861.)

We have now to explain wherein the difference between Real and Accommodation Paper consists, and wherein the danger of Accommodation Paper lies.

Suppose that a manufacturer or wholesale dealer has sold goods to ten customers, and received ten *bonâ-fide* trade bills for them; he then discounts these ten bills with his banker. The ten acceptors of these bills, having received value for them, are the principal debtors to the bank, and are bound to meet them under the penalty of commercial ruin. The bank has their names as acceptors, or real principal debtors, on the bills, and its own customer as security on each of them. The bank also keeps a certain balance of its customer's in its hands, proportionate to the discount allowed.

Even under the best of circumstances, an acceptor may fail to meet his bill. The banker then debits his customer's account with the bill, and gives it to him back. The drawer has an action against the acceptor, because it is a real debt due to him. If there should not be enough on his account, the customer is called upon to pay the difference. If the worst comes to the worst, and its customer fails, the bank can pursue its remedy against the estates of both parties, without in any way affecting the position of the other nine acceptors, who, of course, are still bound to meet their own bills.

In the case of Accommodation Bills there are very material differences. To the eye of the banker there is no visible difference between Real and Accommodation Bills. They are, nevertheless, very different, and it is in these differences that the real danger of Accommodation Paper consists.

In Accommodation Bills, the person for whose accommodation the drawing, indorsing, or accepting, as the case may be, is done, is bound to provide funds to meet the bill, or to indemnify the person who lends his name. In a Real Bill, the acceptor is the principal debtor, who is bound to provide funds to meet the bill, and the drawer is a mere surety. In the most usual form of Accommodation—that of an acceptance—the drawer is the real principal debtor, who has to provide funds to meet the bill, and the acceptor is a mere surety; and if he is called upon to meet the bill, he is entitled to sue the drawer, as the principal debtor, for the amount.

Now suppose, as before, A gets ten of his friends to accommodate him with their names as acceptors, and discounts these bills with his banker, it is A's duty to provide funds to meet every one of the ten bills. There is, in fact, only one real principal debtor and ten sureties. Now, these ten Accommodation acceptors are ignorant of each other's proceedings. They only gave their names to the drawer on the express understanding that they were not to be called upon to meet their bill, and accordingly they make no provision to do so. If any one of them is called upon to meet his bill, he has an immediate remedy against the drawer. In the case of Real Bills, then, the bank has ten real principal debtors, who would each take care to meet his own acceptance, and only one surety. In the case of Accommodation Bills, the bank has only one real principal debtor to meet the acceptances of ten. Thus, there is only one real principal debtor and ten sureties.

Furthermore, if one of ten real acceptors fails to meet his bill, the bank can safely press the drawer, because it will not affect the position of the nine other acceptors. But if the drawer of the Accommodation Bill fails to meet any one of the ten acceptances, and the bank suddenly discovers that it is an Accommodation Bill, and it is under large advances to the drawer, it dare not, for its own safety, press the acceptor, because he will, of course, have immediate recourse against the drawer as his debtor, and the whole fabric will probably tumble down like a house of cards. Hence, the chances of disaster are much greater when there is only one person to meet the engagements of ten, than when there are ten persons, each bound to meet his own acceptance.

The real danger, then, to a bank in being led into discounting Accommodation Paper, is that the position of principal and surety is reversed. It is deceived as to who the real debtor is, and who the surety is, being precisely the reverse to what they appear to be, which makes a very great difference in the security of the holder of

the bills. In fact, the parties are not governed by the contract **Visible** on the face of the bills, which the banker believes in, but by a **Latent** contract collateral to the bills, of which he knows nothing.

To advance Money by way of Cash Credit, or by loan with security, is quite a different affair, because the bank then knows exactly what it is doing, and as soon as anything occurs amiss, it knows the remedy to be adopted. Moreover, it never permits the advance to exceed a certain definite limit; but it never can tell to what lengths it may be inveigled into discounting Accommodation Paper, until some commercial reverse happens, when it may discover that its customer has been carrying on some great speculative operation with capital borrowed from it alone.

This is the *rationale* of Accommodation Paper, pure and simple.

We have now to examine a species of Accommodation Paper still more subtle and still more dangerous, and this because though it is really and in its very nature Accommodation Paper, yet it is not so in technical jurisprudence.

On Mutual Accommodation Paper, and its danger to a Bank.

The Accommodation Paper just described may be termed Simple Accommodation Paper, and that which we have now to describe may not inaptly be designated as Compound Accommodation Paper.

We have shown that the real and genuine distinction between Real and Accommodation Paper is that Real Paper is based upon a simultaneous transfer of goods, the proceeds of which are expected to redeem the bill at maturity; and in Accommodation Paper, bills are created, not based upon any past or simultaneous transfer of goods, but for the express purpose of purchasing goods in the future to redeem the bills. If these two species of transactions are done with equal care and judgment, and with the full knowledge of all parties of the real nature of the transaction, there is nothing more dangerous or improper in one species of paper than in the other.

We have now to deal with a species of paper which is, in its real nature, Accommodation Paper, because it consists of Paper not founded upon any past or simultaneous transfer of goods, but consists of Paper created for the express purpose of purchasing goods after it has been created. But yet in jurisprudence it is not Accommodation Paper, because it is held to be given for good and valuable consideration; and, therefore, though in very many cases it

is a moral fraud, yet it is not a legal fraud, and it is to this species of Paper that most of the great Commercial Crises are due.

We have now to explain how very much more dangerous to a bank this species of Paper is than the worst calamities which can happen from Real Paper.

We have elsewhere pointed out the very common error that all Bills of Exchange are paid in money. Bills in modern usage are very seldom paid in actual money, and only in a very few isolated instances; they are paid by discounting fresh bills. Thus, in ordinary times, Debts are always paid by creating new Debts. No doubt, if the banker refuses to discount the new bills, the customer must discharge his bills in money. But, then, no trader ever expects to have to do that. He has usually a fixed discount limit, and if he brings good bills, he has little less than an absolute right to have them discounted. And if the banker suddenly calls upon him to meet his bills in money, it might oblige him to sell his bills at a great sacrifice, or might cause his ruin.

However, it is always supposed that the bills discounted are good ones; that is, they could be paid in money if required. Thus, though in common practice very few bills are really ever paid in money, it is manifest that the whole stability of the bank depends upon the last bills discounted being good ones.

Now suppose that a customer for a considerable time brings good bills to his banker, and acquires a good character with him, and so throws him off his guard. Owing, perhaps, to some temporary embarrassment, or wishing to push his speculations, he goes to some of his friends, and gets them to accept bills without having any property to meet them. He then takes these accommodation bills to his banker. The banker, trusting to his good character, discounts the bills. In course of time these accommodation bills must be met, and the way he does it is to create fresh similar bills. The drawer may be speculating in trade, and losing money every day; but his bills must be met, and there is no other way of meeting them but by constantly creating fresh bills. By this means he may extract indefinite sums from his banker, and give him in return—so many bits of paper. Now, when discounts are low, and times are prosperous, this system may go on for many years. But at last a crisis comes. The Money, *i.e.* the Credit, Market becomes “tight.” Bankers not only raise the rate of discount, but they refuse to discount so freely as before. *They contract their issues.* The accommodation bills are in the bank, and must be met. But if the banker refuses to discount fresh

bills, they must be met in money. But all the property the speculators may have had may have been lost twenty times over; so, when the crisis comes, they have nothing to turn into money. Directly the banker refuses to meet his customers' bills by his own Credit, he wakes to the pleasant discovery that, in return for the money he has paid, he has got so many pieces of paper!

This is the *rationale* of Accommodation Paper, and we see how entirely it differs from Real Paper. Because with Real Paper and *bonâ-fide* sales, though losses may come, yet, directly the loss occurs, there is an end of it; but with Accommodation Paper, the prospect of a loss is the very cause of a greater one being made, and so on in an ever-widening circle, until the canker may eat into the banker's assets to any extent.

It is also clear that if a trader, having got a good character and a high position in commerce, may do so much mischief to a single banker, his capacity for mischief is vastly increased if, from his high position and old standing, he is able to discount with several banks, for then he is able to diminish greatly the chances of detection.

The history of the most notorious instances of failure caused by the scandalous abuse of Accommodation Paper would illustrate these remarks; but their analysis would be too long for a work of this kind, which is mainly concerned with the exposition of principles, without too elaborate an account of details.

From these accommodation bills to forged bills there is but one step. It is but a thin line of division between drawing upon a man who is notoriously unable to pay, and drawing upon a person who does not exist at all, or forging an acceptance. In practical morality and in its practical effects there is none. Traders do not even take the trouble to get a beggar to write his name on their bills, but they invent one. The case of traders in a large way of business dealing with a vast number of small country connections affords great facilities for such rogueries. They begin by establishing a good character for their bills. Their business gradually increases. Their connections, as they say, gradually extend all over the kingdom. The banker, satisfied with the regularity of the account, cannot take the trouble to send down to every small country town to inquire into the acceptor of every small bill. The circle gradually enlarges, until some fine morning the whole affair blows up. The ingenuity sometimes exercised by traders in carrying out such a system is absolutely marvellous.

It is in times of speculation in large commodities that Accommodation Paper is peculiarly rife. In a great failure of the harvest when great importations were required, and it was expected prices would rise very high, every corn merchant wanted to buy as much as possible. But if no real sales had taken place, there could be no real trade bills. They therefore proceeded to manufacture accommodation bills in order to extract funds from bankers to speculate with. No banker in his senses would actually advance money for them to speculate with with his eyes open. Nevertheless they must have funds. This they did by cross acceptances. One merchant drew bills upon another merchant, who accepted them; he then drew in turn upon his drawer, who accepted in his turn. They then went and discounted these cross acceptances with as many bankers as possible, in as many different parts of the country as possible, so that their proceedings might not come too much under the notice of any particular bank.

Such proceedings can never take place again in the corn trade as they used to, because, with the area of supply so extended, and means of transport so accelerated and cheapened as they have been during the last forty years, no failure of the harvest in this country can ever cause corn to rise to such a price as it did in 1847; though what it might do in time of war we cannot say, and it is to be hoped that such an experience may not occur.

In the Crimean War, there was a great and sudden demand for shipping; an enormous amount of Accommodation Paper was manufactured by the Liverpool shipowners, and discounted all over the kingdom.

Whenever great speculation in commodities may take place again the same things will recur. And the quantities of Accommodation Paper manufactured on such occasions is something astonishing. This Accommodation Paper is discounted by banks creating fictitious credits in the form of Deposits. So these deposits swell up, they are only so many Bank-notes in disguise, and then the public holds up its hands in astonishment at the vast sums the banks are able to trade with, whereas it is not solid money at all, but only paper. But this immense augmentation of the Circulating Medium of Currency, raises prices all round.

The insurmountable objection, therefore, to this species of paper is the dangerous and boundless facility it affords for raising money for speculative purposes. And there is much reason to fear that this pernicious system prevails to a much greater extent than is commonly supposed. Even in quiet times it has been said

it is surmised that one-fourth of the paper in circulation is Accommodation Paper; and in times of great speculation the proportion is far greater than that.

The Legislature has imposed rigid limits on the issues of notes by banks, and many persons think that it might be possible to curb the creation of this pestilent kind of paper by law.

But, unfortunately, such a thing is not possible. The difficulty consists in determining what is really Accommodation Paper. As a matter of Economics, all these cross acceptances are pure Accommodation Paper; but they are not so in jurisprudence.

The whole question turns on the *Consideration*. An accommodation bill in law is a bill to which the drawer, acceptor, or indorser, as the case may be, puts his name, without consideration, for the purpose of benefiting or accommodating some other party, who is to provide funds to meet the bill when due. But the consideration may be of many sorts. It does not by any means necessarily imply a sale of goods at the time. Moreover, a bill may be an accommodation bill at the time it is created, but if any consideration is given for it during the period of its currency, it ceases to be an accommodation bill.

Moreover, the consideration may be of many sorts. If A draws a bill upon B, who accepts it for A's accommodation for the express purpose of enabling him to get it discounted by a bank, that is a pure accommodation bill. But if B draws an exactly similar bill upon A, who accepts it for the accommodation of B, to enable him to get it discounted by a bank, then neither of the bills is an accommodation bill, but they are each of them given for a good consideration. The liability which each incurs by accepting the other's bill is the consideration for his own acceptance.

To an unlearned reader this may seem somewhat strange doctrine, but, nevertheless, it is firmly established law.

In *Rolfe v. Caslon* (2 H. Blacks. 571), A and B being desirous to accommodate each other, each drew a bill upon the other, and accepted one in return, the two bills being precisely alike in date, amount, and time of payment, neither party having any effects of the other in his hands. The Court was clearly of opinion that the two bills were mutual engagements, constituting on each part a Debt, the one being the consideration for the other.

In another case, *Cowley v. Dunlop* (7 T.R. 565), Grose, J., said, "The instant the bills were exchanged, each was indebted to the other in the sum which was the amount of their respective acceptances; for the counter-acceptances were a good consideration to found a

Debt upon either side respectively. In the case of a single accommodation acceptance, there is no debt to the acceptor; the Debt only accrues by the payment of the money. The acceptor *quod* acceptor can never be a creditor, his acceptance imports the admission of a debt from him to another; and when he has paid as acceptor, if he paid for any other person, in consequence of any request from that other, he becomes a creditor, *not on the face of the bill, but by a contract collateral to the bill*. When two persons exchange acceptances, each becomes the debtor of the other upon his accepted bill. But when a man accepts without consideration, he is never a creditor of the person for whom he accepts till he pays—from that payment arises the Debt. But when the acceptances were exchanged, the debts arise from these acceptances.”

These doctrines were repeated and confirmed by the whole Court of King's Bench, in the subsequent cases of *Rose v. Sims* (1 B. and Ald. 521), and *Buckler v. Buttivant* (3 East, 72).

This doctrine, which is quite unanswerable, shows how impossible it is to deal legislatively with this kind of Accommodation Paper. At least, they must be very poor rogues indeed who cannot manufacture any amount of *bonâ-fide* bills they please. Two ragamuffins have only to get as many bills as they fancy—if they can only pay for the stamps. One engages to pay £1000 to the order of the other; that would be an Accommodation Bill. The second then engages to pay £1000 to the order of the first. These are no longer Accommodation Bills, but are two good *bonâ-fide* bills, each given for a good consideration. If two such bills are good, then two thousand, or any larger number of similar bills, are equally good. Bankers would look askance at such paper; but jurisprudence declares them all to be good *bonâ-fide* bills, given for a good consideration.

Stated in the above form, the doctrine may seem somewhat startling to some persons; but when we consider the principle of the case, and not the accidental circumstance that the two persons who may do it are insolvent, the difficulty disappears, for it is just what happens every day in banking. It is quite common for a banker to discount the simple promissory note of a well-to-do customer. The note given by the customer constitutes the consideration for the Deposit, Credit, or Right of Action created by the banker; and the Right of Action or the Deposit created by the banker is the consideration given to purchase the note of the customer. Each, therefore, is the consideration for the other—each party gives value to the other.

It is precisely the same principle in the other case. If the issuers of the bills are able to purchase goods with them, they may be paid off at maturity. If they cannot do so, the re-exchange of the securities is the mutual payment of each debt, precisely in the same manner as when two bankers exchange notes, or when a merchant pays his acceptance to a banker in the banker's own notes. The two contracts are extinguished by *Compensation*. The accident that both the creators of the bills are insolvent does not affect the juridical principles of the case.

In times of great speculation, these cross acceptances are manufactured to an enormous extent among merchants; and the more cross acceptances they can manufacture and get discounted by bankers, the more funds the adventurers have to speculate with. But such things are always sure to be overdone. As soon as any new and extensive market is suddenly opened up, multitudes of speculators are sure to rush in, and create vast amounts of paper which can never be redeemed. And when this is done on a sufficiently large scale, a commercial crisis is produced; and if this commercial crisis is not properly and judiciously met, and it reaches a certain degree of intensity, it produces a monetary panic, in which merchants and bankers fall together.

ANNUITY.

An **Annuity** is the Right to demand and receive a series of payments.

The lowest form of an Annuity is the Right to receive one future payment, such as a Bank-note or a Bill of Exchange. The highest form of an Annuity is to receive a series of future payments for ever, such as an estate in land or the Funds. An Annuity to receive a series of payments intermediate between these extreme terms is called a *Terminable Annuity*.

We shall now show the great practical importance of applying the Positive and Negative signs to Property (**Property**), and of denoting the Right to Property in things which have already come into possession as *Positive*, and the Right or Property to things which will only come into possession at some future time as *Negative*. Because many species of Property are of a mixed nature; that is, the entire Property in them consists partly of Corporeal Property and partly of Incorporeal Property.

Property in Land is the highest of all, and to understand the nature of Property in Land is the grammar of Property in general.

Suppose that we saw a piece of Land, on which there were actually existing products of the value of £3000. Suppose that we wished to purchase that piece of Land. Would the owner of the Land be content to sell it to us for £3000? Most assuredly he would not. He would say that, though there were only products of the value of £3000 on the Land in actual existence at the present time, yet the Land would produce a similar amount of products to the end of time. He would say that we must purchase not only the right to the existing products of the land, but also the Right to the annual products of the land to the end of time; that is, an infinite series of future products, which will only come into existence year by year.

Thus, Property in Land consists of two perfectly distinct parts—the Right to the products which *have already* come into existence, and the Right to the products which *will* only come into existence in *future*.

Thus, Property in Land may be conveniently denoted thus :

Existing products of the land (+ £3000), together with (- £3000, - £3000, - £3000 . . . for ever).

Where the Positive Sign denotes the products which have already come into existence, and the Negative Sign denotes the products which will only come into existence year by year for ever.

But though the yearly products of the land will only come into existence at future intervals of time, the Right, or Property, to them when they do come into existence is **Present**, and it may be bought and sold like any material chattel—like a watch or a horse. That is to say, each of these annual products has a **Present Value**, and the purchase money of the land is simply the *Sum of the Present Values of this infinite series of future products*.

Again, although this series of future products is infinite, a simple Algebraical formula shows that it has a finite limit; and that finite limit depends chiefly on the usual average Rate of Interest. When the usual average Rate of Interest is 3 per cent., the theoretical value of the land would be about 33 times its annual value. Consequently, of the total value of land, one part only is Corporeal, the remaining 32 parts are Incorporeal.

Now, when a purchaser has bought an estate in land, it may be said, without any great metaphor, that it **Owes** him a series of annual payments for ever; because he only bought it in the belief, or expectation, that it would yield these profits. Hence, we may

call the Right to receive the future profits of the land the **Credit** of the land, and by the notation we have adopted, it is a **Negative Economic Quantity**.

Thus the purchase of an estate in land is simply the purchase of a Perpetual Annuity.

Every Sum of Money is Equivalent to the Sum of the Present Values of an Infinite Series of Future Payments.

The investigation of the Theory of the Value of Land demonstrates a proposition of great importance in Economics.

It is seen that the £100,000 given to purchase the estate in land, expected to produce £3000 a year, is, in reality, the sum of the Rights to its future products for ever. Every annual product has a **Present Value**, and the value of the land is simply the Sum of this infinite series of Present Values.

But the same is evidently true of every sum of money. Hence, every sum of money is not only equal in value to a certain quantity of material goods, or to a certain quantity of services, but also to a **Perpetual Annuity**.

Hence, an Annuity, or the Right to receive a series of future payments, is an Economic Quantity, which may be bought and sold, or exchanged, or whose value may be measured in money, like any material chattel.

As when a sum of Money is given to purchase Land, or the Bonds, or Municipal or other Obligations, such as Railway Ventures.

So an Annuity may be paid to secure a certain sum of money given time, or on a given contingency, such as a Life or Fire Insurance.

It is thus seen that Economics comprehends Three great departments—(1) Material Things; (2) Personal Qualities, both in the form of Labour and Credit; (3) Annuities.

The first school of Economists restricted their attention to the first of these departments, and refused to take any notice of the other two. Adam Smith, J. B. Say, and J. S. Mill have given much attention to the second, and treated Labour as a marketable commodity. They have also noticed the existence of the third department, but they never made any attempt to exhibit the Commerce in Rights. And yet, at the present day, it is the most extensive of any.

Hence, it is seen that all Annuities, or Rights to receive a series

of future payments, whether the Right be to receive a single future payment, or a limited, or an infinite number of them, are **Negative Economic Quantities**.

These Negative Economic Quantities comprehend all Mercantile and Banking Credit, such as Bank - notes, Cheques, Bills of Exchange, and all Instruments of Credit; Exchequer Bills, Navy Bills, Dividend Warrants, &c.; the Land, the Funds, Terminable Annuities, Shares in Commercial Companies, the Goodwill of a Business, a Professional Practice, Copyrights, Patents, Tolls, Ferries, Market Rights, Advowsons, Benefices, Shootings, Fisheries, Leaseholds, Policies of Insurance of different kinds, and many other valuable Rights, amounting in value to scores of thousands of millions in this country, of which there is scarcely any notice in the common text-books on Economics.

By introducing all this class of Incorporeal Property, I have doubled the field of Economics.

ASSIGNABLE INSTRUMENTS.

There are two classes of paper documents which circulate in commerce, and are transferable by indorsement, which are of two distinct natures—(1) those which arise out of a **Bailment**, and (2) those which arise out of a **Debt**.

When goods are bailed, or entrusted to the care of a person, either to keep in safe custody for the owner, or to transport them from one place to another, the bailee, or trustee, gives the owner a paper document acknowledging their receipt, and promising to deliver them to the person to whom the paper document is duly indorsed.

In this case the bailee, or trustee, acquires no property in the goods. If he used them for his own purposes or for his own profit it would be a felony. The property in the goods resides in the bailor, and remains in him till they are duly and lawfully transferred to the indorsee. This paper, therefore, is a title to those specific goods and to no others. It is one property with the goods, and cannot circulate separately from them, and the law of its transfer follows the law of goods. It is transferable by indorsement, but the validity of the transfer depends on the validity of the title of the transferor. If the transferor is not lawfully possessed of the goods he cannot transfer the property in them, which he does not possess, to anyone else. The property in them remains in the rightful

owner, who can recover them if he finds them in the unlawful possession of anyone else. This right of recovery is termed the *Jus vindicandi*. Such documents are all *Jura in re*.

The class of Assignable Instruments comprehends Bills of Lading, Dock Warrants, and others.

These documents are termed in law, Documents of Title.

BAILMENT AND DEBT.

On the Distinction between a Bailment and a Debt.

There is a very common and most important misconception which must be cleared away.

There are three classes of Paper Documents which circulate in commerce, and have a superficial resemblance; that is, they are all transferable. Many writers, seeing this superficial resemblance, consider them all to be of the same nature, and include them under the title of **Credit**. This, however, is a profound and most vital error.

These three classes of instruments, though they have one point in common, namely, being transferable, are yet fundamentally distinct in their nature and effects.

These three species of Paper Documents are :

1. Bank-notes, Cheques, Bills of Exchange, Exchequer Bills, Navy Bills, Dividend Warrants, and all other Securities for Money. All these are Instruments of **Credit**, and are termed **Valuable Securities** in Law. They are all *Jura in personam*, and are **Negotiable Instruments**.

2. Bills of Lading, Dock Warrants, and all other Titles to specific goods. They are termed **Documents of Title** in Law. They are all *Jura in re*, and are **Assignable Instruments**.

3. Drafts, or Orders for the payment of Money.

In order to understand clearly the fundamental distinction between these three classes of documents, we shall explain how each arises.

Bank-notes, Cheques, Bills of Exchange, and all Securities for Moneys arise out of the Sale, or Exchange, of the **Mutuum**. Paper Credit always arises out of a Sale or Exchange. The goods, or money given in exchange for the Credit, become the actual Property of the buyer, and the seller has nothing but a Right of Action against the buyer. It is the absolute fundamental requisite

of all forms of Paper Credit, that they shall be absolutely severed from any specific money. They are even forbidden to be paid out of any specific fund. They must be nothing but pure abstract Rights against a **Person**, who is bound to pay them without any condition. That is the very circumstance from which they derive their name of **Credit**, because they are only accepted in commerce on the faith, confidence, and belief that the Debtor can redeem them when due. Hence, they are independent Economic Quantities. They are a mass of Exchangeable Property, just like any other merchandise. They do not *represent* money, but they are exchangeable for money. They are all part of the Circulating Medium, or Currency. They all affect prices, and produce exactly the same effects as an equal quantity of money. All these securities for Money arise out of a Debt.

But **Bills of Lading** and **Dock Warrants** arise out of a transaction of a totally different nature.

When a person ships goods on board a vessel, he receives from the master a Paper Document, acknowledging the receipt of the goods, and promising to deliver the goods to another person, the consignee, or to anyone else to whom the consignee may have transferred the document by indorsement. And so it may be sold, transferred, and assigned any number of times, exactly like a Bill of Exchange. And the person to whom the Bill is last indorsed may go to the master and demand the goods from him, like the payee of a Bill of Exchange. And the master is bound to deliver the goods to the last indorsee, because they are his Property.

Similarly, when goods are deposited in a dock warehouse, the dock master gives a Paper Document, or Receipt, for them, of a similar nature to a Bill of Lading, which document is termed a **Dock Warrant**. This may be sold and transferred any number of times, by indorsement, like a Bill of Lading or a Bill of Exchange, and whoever buys the Dock Warrant becomes the owner of the goods described in it, and is entitled to demand and receive them from the dock master.

And there are other Paper Documents of a similar nature.

The delivery of such goods, in these cases, is termed a **Bailment**. The master, or the dock master, is merely the Bailee or Trustee of the goods, and he acquires no Property in them. He receives merely the Right of Possession of them for a limited time, and for a specific purpose. He has no right to convert them to his own use, or to deal with them in any way, except the one for

which they are bailed to him ; if he did so, it would be a robbery, and he would be indictable as a thief. In such cases no new Property is created. The property in the goods remains with the shipper or depositor, and is transferred by him along with the Bill of Lading, or Dock Warrant.

From this it follows that Bills of Lading and Dock Warrants are titles to specific goods, and to no others. They form **one** Property with the goods, and cannot be separated from them. Whoever acquires the property in the Bill of Lading, or Dock Warrant, acquires the property in the very goods described in them. Thus these Paper Documents may be said to *represent* goods, and they travel along with the goods. In every case where a Bill of Lading, or Dock Warrant, is offered for sale or pledge, there must be some specific goods to which it is a title. If there were not, it would be a fraud, and an indictable offence. Every person, therefore, who buys or takes such an instrument in pledge, knows that he has acquired a title to certain specific goods. Buying the document is only a convenient way of buying the goods themselves.

In this case, therefore, there is no exchange, and, therefore, no act of commerce or Economic phenomenon. These documents have no value in themselves ; *i.e.*, they cannot be bought and sold separately from the goods themselves. No one ever spoke of the **Value** of a Bill of Lading, or a Dock Warrant. Such documents are not **Credit**, because the owner does not simply *believe* that he can get goods in exchange for them ; he knows that he has acquired the property in certain specific goods. These Paper Documents are, therefore, nothing in themselves ; they are no addition to the general mass of Exchangeable Quantities ; they are no part of the Circulating Medium, or Currency ; and they do not affect prices in any way.

In a similar way, when a person mortgages his house or land, he actually sells the house or land to the mortgagee. The Mortgage Deed is the deed of sale, and is the title to the house or land, and cannot be separated from them.

Hence, all these documents, Bills of Lading, Dock Warrants, Pawnbrokers' Tickets, Bills of Sale, Mortgage Deeds, &c., belong to the class of **Jura in re**, and are Real Rights, or Corporeal Property.

Bills of Lading and Dock Warrants circulate in commerce equally with Bank Notes and Bills of Exchange, but they circulate in a totally different way. Bills of Lading and Dock Warrants always

travel along with the goods they represent, and if they are transferred any number of times, it shows that the goods have been transferred that number of times. But Bills of Exchange and Bank-notes are exchanged against goods like money, and if they are transferred any number of times, they circulate an equal amount of goods to themselves at each transfer.

Moreover, the law affecting the transfer of these documents is different. All Rights to demand Money follow the law of Money; *i.e.*, when they have once been passed away to an innocent holder in commerce, he has acquired a good title to them, and the original owner has lost his *Jus vindicandi*.

But Bills of Lading and Dock Warrants, being in fact identical with the goods, follow the law of goods. If they have been stolen, and sold or pledged, the owner retains his *Jus vindicandi*, and the person who has bought them, or taken them in pledge, however honestly, must render them up to the true owner.

Hence, it will be seen that it is a vital economical error to confound the distinction between Bank-notes or Bills of Exchange, and Bills of Lading and Dock Warrants.

3. The third class of Paper Documents, termed Drafts, or Orders for the Payment of Money, also arise out of a Bailment; but we have treated of them in a separate section (**Draft**).

BALANCE OF TRADE.

The doctrine of the Balance of Trade exercised such a powerful influence over legislation and national fortunes for two centuries, and its overthrow, together with the catastrophe of Law's system of Paper Money, or the Mississippi scheme, were the causes from which the science of Economics originated in modern times, that we must explain the phrase.

The expression Balance of Trade is a pregnant example of Bacon's aphorism that the fallacies of language are the most troublesome of all, and of the extreme difficulty of eradicating those which have some portion of truth in them. It is also a conclusive reply to those persons who think that the meaning of words is of no consequence in Economics.

As this error, however extensively it prevailed in former times, is almost exploded now, we do not care to decide where it arose. England, France, and Italy all contend for the honour of the cap and bells; nor is it worth while to settle the priority of folly,

though Spain may probably be really entitled to it. In the conquest of the New World, gold was the chief object of their ambition, and their new acquisitions were estimated chiefly as they were capable of producing the precious metals. The object of all trade was to acquire the precious metals, and the profits of commerce were estimated just as they brought in gold and silver.

As gold and silver only were reckoned as Wealth, because they outlasted everything else, and other commodities as nothing, because for the most part they perished in more or less time, the idea very naturally grew up that what *one side gained the other lost*. Montaigne was one of the first to formulate this unhappy doctrine, and for a long period it was believed in by the most eminent statesmen. Bacon even believed in it.

Having, then, adopted the dogma that gold and silver only are Wealth, and that what one side gained the other lost, they estimated the gain and loss to a country in this way. They said that if the exports of a country exceeded the imports in *value*, the balance must be received in money; and that if the imports exceeded the exports in value, the balance must be paid in money. The difference in value between the exports and the imports was called the Balance of Trade, which it was assumed must be paid in money; and the trade of the country was held to be favourable or the reverse, according as the Balance of Trade was for it or against it. That is, the Profit was held to consist in the quantity by which the Value of the exports exceeded the Value of the imports, and the Loss was held to consist in the quantity by which the Value of the imports exceeded the Value of the exports.

Let us take a very simple example of the rudest description of trading, which will illustrate the point as well as the most elaborate.

When our ships first traded to the South Sea Islands, they took out with them axes, beads, and other trifles, which were of very little value in this country, and bartered them for all sorts of curiosities, such as shells, &c., which were very valuable in England. A pair of fine shells from the South Sea Islands, in many cases, is worth ten guineas in England, which, perhaps, an English sailor obtained in exchange for an axe which cost half-a-crown in England. The English sailors, perhaps, thought the natives very simple to give away so many valuable curiosities for such common things. We cannot doubt that the natives had exactly the same opinion of the English sailors; they thought them very simple to give away such valuable things as axes, beads, &c., for such common things as a few shells. Each party, however, exchanged what was common

and cheap in his own country for what was scarce and valuable. The axes were many times more valuable in Fiji than the shells; the shells were many times more valuable in England than the axes. Thus an English sailor, by giving away what, perhaps, cost half-a-crown, gained what was worth ten guineas in London, and the difference was his profit. And thus both parties gained by the exchange. And this is the genuine spirit of commerce. This simple transaction is a type of all commerce. The value of the shells in London arises from the desire of the people to possess them, and their scarcity. The value of the axes in Fiji arose from the desire of the people to possess them, and their scarcity. The coloured beads were just as valuable to the poor untutored savages as precious stones are to civilised Europeans. The commerce of all nations is exactly similar in principle to that between the sailor and the savages. It all consists in exchanging things which are comparatively cheap and common in two countries, for what is dear and scarce in them reciprocally. And, of course, both parties must gain by the very nature of the transaction.

But according to the old doctrine of the Balance of Trade, England, having exported an axe worth half-a-crown, and having imported shells worth ten guineas, still owed the balance, which required to be paid in gold!

We observe, from this simple example, that the profit is measured by the excess of the value of the imports over that of the value of the exports, because the imports were the payment for the exports; and as all the expenses of conveying the exports to the foreign country, and of bringing the imports from the foreign country, must come out of the difference, and as there must be, in addition, the merchant's profit, the value of the imports must considerably exceed the value of the exports, if the commerce is to be carried on.

The supporters of the Mercantile System quite overlooked the fact that the imports were, in general, the payment of the exports and, therefore, the profits were the greater by just so much as the value of the imports exceeded the value of the exports.

In the simple case of exchange described above, both sides gained. But it is evident that this process could not go on indefinitely; because, if too many shells were imported into England, their value would diminish so much that it would cease

to defray the cost of the trade. So if too many axes were imported almost to the point where their value would fall so much that they would not be worth the cost of the transport into England, by shells enough to defray the cost of the traffic, and by axes enough to defray the cost of the traffic, the traffic would cease.

As a general rule, therefore, both sides must gain in commerce. For why should anyone voluntarily continue to make exchanges to his own loss? No doubt there may be individual cases where traders are unfortunate and make losses. But as a general rule while commerce goes on, the necessary inference is that it is mutually profitable, and when profit ceases commerce must cease.

It is clear, therefore, that the real truth is the exact reverse of the doctrine of the Balance of Trade.

For more than two hundred years this extraordinary delusion kept possession of the minds of nations, and all commerce between them was reduced to a general scramble to obtain possession of the greatest amount of gold and silver. Every effort was made by war and legislation to obtain money, and nothing but money. Everything was sacrificed to the endeavour to force foreign trade. Exportation was encouraged in every way, and importation was discouraged and impeded. Each nation supposed that it was benefited by and interested in the destruction of its neighbours. Montaigne and Bacon repeated the doctrine that the gain of one must be the loss of the other. Even Voltaire repeated this fatal dogma.

J. B. Say says that in the space of two hundred years, during which Statesmen were blinded with this horrible delusion, no less than fifty years were spent in commercial wars directly arising out of this stupendous folly. Fifty years of war, with all its horrors, waged for a chimera—a pure fiction—a thing which had actually no existence at all. Do we not say truly that true views in Economics are of the utmost importance to mankind? True Economics turned the light of science on a single expression, and the result was to destroy for ever a fallacy which let loose upon the earth the demon of war for fifty years!

The overthrow of this fatal fallacy was due to the Economists, who laid the foundations of modern Economics. Nevertheless, they only achieved half the truth.

They maintained that in an exchange neither side gained or lost.

Adam Smith completed the work by his immortal demonstration that both sides gain in an exchange, although that clear-sighted Economist, Boisguillebert, in the beginning of the century, maintained the same truth. But this was merely a passing observation, and attracted no attention.

By this single demonstration Adam Smith revolutionised the ideas and policy of nations, and showed that instead of injuring and destroying each other, it was their true policy to promote and encourage each other's prosperity.

BANK.

We have now to explain the meaning of the word **Bank**, as great misconception prevails regarding it.

If we take up the most common works on Banking, such as *Gilbart on Banking*, we find it stated that the word **Bank** comes from the Italian *banco*, which means a bench, because it is alleged that the Italian money-dealers, or money-changers, kept their money on a bench, or counter, whence they were said to have been called *Banchieri*.

This notion, however, is entirely erroneous.

The Italian money-changers, as such, were never called *Banchieri* in the middle ages, nor are persons whose sole business is money-changing ever called Bankers in any language.

So long as they confined their business to money-changing and money-lending they were called *Cambiatores*, *Cambitores*, *Campsores*, *Speciarii*, *Argentarii*, *Nummularii*, *Trapezitae*, *Danistae*, *Collybistae*, and *Mutuatores*; and their places of business were called *Casane*, and not *Banchi*.

At one time there was considerable discussion in Italy as to the origin of the word *Banco*. Many writers maintained that it came from *abacus*, a calculating machine. But Muratori entirely disapproves of such a derivation. He says (*Antiq. Ital. Med. Aevi*. vol. ii. p. 1148): "To me, on the contrary, the word seems to have come from the German word **Banck**, which was a very ancient word in that language"; and he says that the word was first used for a store of goods in the town of Brescia.

Ducange also says (*Med. et Infim. Lat. Lex.*, s.v. *Bancus*): "Bank is of Franco-German or Saxon origin; no other is to be sought for."

There is no doubt whatever that these learned authors are right.

The word **Banck** in German has two meanings:

1. A heap, or mound, like a sandbank; hence a store, like the goods in a shop.

2. A bench, or a seat; because the surface of a sandbank was usually smooth and level.

Many writers, who are not acquainted with the technicalities of business, suppose that the word **Bank** comes from the second of these meanings, because they suppose that the *banco* was the counter upon which the money-changers kept their money.

But the technical meaning of the word **Banking**, and the invariable meaning of the word as used by the Italian Economists, and

the universal meaning given to the word when it was first introduced into English, conclusively prove that the preceding opinion is erroneous, and that, as a technical term in commerce, it is derived from the first of the meanings given above, *i.e.* a mound, or heap.

The word Bank originated in this way :

The Roman State made it a cardinal maxim of their policy not to carry on more than one war at a time. In 1171 the City of Venice was at war both with the Empires of the East and the West. Its finances were in a state of great disorder, and the Great Council levied a forced loan of 1 per cent. on all the property of the citizens, and promised them interest at the rate of 5 per cent. Commissioners were appointed to manage the loan, who were called the *Camera degli Imprestiti*. Such a loan has several names in Italian, such as *Compera*, *Mutuo*, &c. ; but the most usual name is **Monte**, a joint stock fund. This first loan was called the *Monte Vecchio*, the old loan. Subsequently two similar loans were contracted, and called the *Monte Nuovo* and *Monte Nuovissimo*. In exchange for the money, which became the absolute property of the Government, to be employed for public purposes, the citizens received **Stock Certificates**, or **Credits**, which they might transfer to anyone else ; and the Commissioners kept an office for the transfer of the stocks and the payment of the dividends.

At this time the Germans were masters of a great part of Italy, and the German word **Banck**, meaning a heap, or mound, came to be used synonymously with **Monte**, and was Italianised into **Banco** ; and the public loans were called indifferently **Monti**, or **Banchi**.

It was this office—the Chamber of Loans—which multitudes of writers have supposed was the famous Bank of Venice. But this is a complete mistake. It was in no sense a Bank in the modern sense of the word ; it was simply the National Debt Office ; it was similar to the National Debt Office of the Bank of England ; it was the origin of the Funding System.

Thus, in the *Volpone* of Ben Jonson, the scene of which is laid in Venice, Volpone says :

“I turn no monies in the public **Bank**.”

Meaning, “I do not dabble in the Venetian Funds.”

So an English writer, Benbrigge, in 1646, speaks of the “three **Banks**” at Venice, meaning the three public loans, or **Monti**.

So in Florian and Torriano's *Italian Dictionary*, published in 1659, it says, “**Monte**, a standing **Bank**, or **Mount** of money, as they have in divers cities of Italy.”

That the word *Banco* in Italian means a Public Debt might be proved by numberless quotations.

Thus a recent writer, Cibrario, says (*Economia Politica del Medio Evo*): "Regarding the Theory of Credit, which I have said was invented by the Italian cities, it is known that the first **Bank**, or **Public Debt** (il primo **Banco**, o **Debito Pubblico**), was erected in Venice in 1171. In the thirteenth century paper money is mentioned at Milan; the Credit was paid off. A **Monte**, or **Public Debt** (un **Monte**, o **Debito Pubblico**), was founded in Florence in 1336."

This passage shows that **Banco** = **Monte** = a **Public Debt**.

At Genoa, during the wars of the fourteenth century, the Bank of St. George was formed of the Creditors of the State.

Every Economist in the South of Europe knows that the word **Bank** means a **Public Debt**.

Thus the distinguished Spanish Economist Olozaga, speaking of the Venetian Loans, says (*Tratado de Economia Politica*, vol. i. p. 101): "El Monte Vecchio (Banco Viejo) . . . el Monte Nuevo (Banco Nuevo)."

So in Baret's *Italian Dictionary*, 1839, it says: "**Monte**, a **Bank**, where they lend or take money at interest."

So Evelyn (*Diary*, vol. i. p. 101) speaks of the *Monte di Pietà* at Padua, where there is a continual Bank of Money to assist the poor.

So Blackstone says (vol. i. p. 322, Kerr's edit.): "At Florence in 1344, Government owed £60,000, and, being unable to pay it, formed the principal into an aggregate sum called metaphorically a **Mount**, or **Bank**."

Everyone acquainted with the writings of the Italian Economists knows perfectly well that they invariably use the words **Monti** and **Banchi** as absolutely synonymous; and in the reports published by the Statistical Office of Italy, I have sometimes seen the words used as synonymous; but I am informed by my friend Professor Loria, of the University of Siena, that the word **Monte** is not now generally used in Italian for a bank.

This was also the meaning of the word **Bank** when it was first introduced into English.

Thus, Bacon says (*Essay on Usury*): "Let it be no **Bank** or common stock."

So Gerard Malynes says (*Lex Mercatoria*, Part II. ch. 13): "*Mons Pietatis*, or Bank of Charity. In Italy there are *Montes Pietatis*; that is to say, *Mounts*, or *Banks* of Charity."

Benbrigge, in his *Usura Accommodata*, 1646, says: "For their

rescue may be collected *Mons Pietatis sive Charitatis*, or *Banke* of Piety, or Charity, as they of Trent fitly call it."

Also: "For borrowers in trade for their supply as their occasion shall require, may be created *Mons Negotiationis*, or *Banke* of Trade."

Tolet says: "*Mons fidei*, a *Banke* of Trust, which Clement XII. instituted at Rome. He that put his money into this *Banke* was never to take it out again," for which the lender received 7 per cent. interest, like the subscribers to the original Bank of England stock. He also speaks of *Mons Recuperationis*, or *Banke* of Recovery, in which the interest was 12 per cent.

The difference between these two, which were Public Debts, was that the first was a perpetual annuity, and the second a terminable annuity, in which the higher rate of interest was repayment of the principal by instalments.

In the time of Cromwell, several proposals were made for erecting public Banks. Samuel Lambe, a London merchant in 1658, recommending them says: "A Bank is a certain number of sufficient men of Estates and Credit joined together in Joint Stock, being, as it were, the general cash keepers, or treasurers, of that place where they are settled, letting out Imaginary Money (*i.e.* Credit), at interest at 2½ or 3 per cent., to tradesmen, or others that agree with them for the same, and making payment thereof by assignation, and passing each man's account from one to another with much facility and ease."

So Francis Cradocke, a London merchant, who was appointed a member of the Board of Trade by Charles II., strongly advocated the introduction of Banks into England, and says: "A *Banke* is a certain number of sufficient men of Credit, joined together in a stock, as it were, for keeping several men's cash in one Treasury, and letting out Imaginary Money (*i.e.* Credit), at interest for three or more in the hundred per annum, to tradesmen or others that agree with them for the same, and making payment thereof by assignation, passing each man's account from one to another, yet paying little money." And he says that "the aforesaid bankers may furnish another petty Bank (or Mount) of Charity."

Thus these writers perfectly well understood the nature and constitution of a Bank. They knew well that the function of a Bank is to advance Imaginary Money—or Credit—and not Metallic Money, as is the popular delusion of the present day.

In a little tract entitled *A Discourse Concerning Banks*, and supposed to be by a Director of the Bank of England, it says,

“There are three kinds of Banks : the first for the mere deposit of Money [like those of Venice, Amsterdam, Hamburg, &c.]; the second for Profit. The Banks of the second kind, called, in Italy, **Monti** [*i.e.*, Public Debts], which are for the benefit of the income only, are the Banks of Rome, Bologna, and Milan. These Banks were made up of a number of persons who, in time of war, or other exigencies of State, advanced sums of money upon funds granted *in perpetuum*, but redeemable. . . . The third kind of Banks, which are both for the convenience of the public and the advantage of the undertakers, are the several Banks of Naples, the Bank of St. George at Genoa, and one of the Banks of Bologna. These Banks, having advanced sums of money at their establishment, did not only agree for a fund of perpetual interest, but were allowed the privilege of keeping cash.”

The Bank of England was of this last kind. It was a company of persons who advanced a sum of money to the Government, and received, in exchange for it, a perpetual annuity, or a Right to receive for ever a series of annual payments from the State. This annuity is, in legal phrase, termed a Bank Annuity—in popular language, the Funds.

There has only been one instance, in this country, of a Bank which did not receive cash from the public. Some time after the foundation of the Bank of England, a company of persons united to advance a million to the Government. They were incorporated as the “Million Bank.” This company existed till nearly the end of the last century, and thus it resembled the original Bank of Venice.

Thus, from these passages—and many more might be cited, if necessary—it is perfectly clear that the word **Bank**, as a term in commerce, is the equivalent of **Monte**, and it meant a joint-stock fund, contributed by a number of persons.

So when the word Bank was introduced into our American colonies, before the Revolutionary War, Professor Sumner says (*History of American Currency*, p. 6, n.), “Bank, as the word was used before the Revolutionary War, meant only a batch of Paper Money, issued either by the Government, or a Corporation. The impression seems to have remained popular, that the essential idea of a ‘Bank’ is the issuing of Notes. . . . The notes issued in ‘Banks,’ or masses, as Loans, were pure Paper Money.”

So in a valuable history of the Notes issued in the United States (*United States Notes. By John Gay Knox, late Comptroller of the Currency*, 1885), it says that an issue of Paper Money to the

amount of £50,000, authorised to be issued by the Treasury, was styled a "Bank."

The essential feature of all these "Banks" was this: the subscribers advanced the money as a Loan, or *Mutuum*; it thus became the actual property of the borrowers, and in exchange for their **Money** the lenders received a **Credit**, *i.e.* a certificate, or promise to pay interest, which they might transfer to anyone else.

And those persons whose business it was to trade like these Banks, *i.e.* to buy money, and in exchange for it to issue **Credit** of various sorts, were termed **Bankers**, and only those.

Thus, as a technical term in business, to "Bank" means to issue **Credit**.

BANKING.

The nature of Banking is entirely misunderstood and misrepresented in the common books on the subject.

Gilbart says (*Principles of Banking*, p. 1): "A banker is a dealer in Capital, or, more properly, a dealer in **Money**. He is an intermediate party between the borrower and the lender. He borrows of one party and lends to another; and the difference between the terms at which he borrows, and those at which he lends, forms the source of his profit."

So a Report of the House of Commons (*on Commercial Distress*, 1858) says: "The use of **Money**, and that only, they regard as the province of a Bank, whether of a private person or incorporation, or the Banking Department of the Bank of England."

Notwithstanding the apparently high authority of these passages, which have misled so many unwary persons, these descriptions of the nature of the business of Banking are entirely erroneous.

There can be no more striking instance of Bacon's *Idola fori*, or Fallacies of Common Discourse, than this description of Banking. Some years ago I gave some lectures on Credit and Banking at the request of the Council of the Institute of Bankers in Scotland, and I observed that I never knew a banker yet who could describe his own business.

In former times, there were many persons who acted as intermediaries between persons who wanted to lend and those who wanted to borrow. They were called Money Scriveners. The father of John Milton was a Money Scrivener. But no one ever called a Money Scrivener a **Banker**.

At the present day, many firms of solicitors act as intermediaries between persons who wish to lend and others who want to borrow. They may have some clients who wish to lend, and other clients who wish to borrow, and they act as agents between them. The first set of clients may entrust their money to the firm to lend to the second set; and the solicitors receive a commission on the sums which pass through their hands.

But no one ever called a firm of solicitors who transact such business "**Bankers**," which shows that there is an essential distinction between the business of Money Scriveners, and of such a firm of solicitors, and the business of "**Bankers**."

Solicitors who transact such agency business do not acquire any **Property** in the money which passes through their hands. They receive it merely as a **Depositum** or **Bailment**. They are only the custodians, or the Trustees, of the money; and it is only entrusted to their custody for the express purpose of being applied in a certain way. The actual property in the money passes directly from the lender to the borrower, through the medium of the Trustees, or Bailees; and if the latter appropriated the money, in any way, to their own purposes, it would be a felony, and they would be liable to be punished for embezzlement, as there have been too many melancholy instances.

But the case of a **Banker** is wholly different. When his customers pay in money to their account, they cede the **Property** in the money to the Banker. The money placed with him is not a **Depositum**, or a **Bailment**, it is a **Mutuum**, or a **Creditum**; it is a "loan," or sale, of the money directly to himself. The banker is not the Trustee, or Bailee, of the money, but it is his actual **Property**. He may trade with it, or employ it in any way he pleases, for his own profit or advantage. The banker buys the money from his customer, and in exchange for it he gives his customer a **Credit** in his books, which is simply a Right of Action to demand back an equivalent amount of money from his banker, at any time he pleases, and the customer may transfer this Right of Action to anyone he pleases, just like so much money. Thus a "banker" is a person who acts in the same way as those States did who contracted a *Banco* or *Monte*, or Public Debt; the money they raised became their own property, and in exchange for it they granted the subscribers **Credits**, or **Rights**, to demand periodical payments of interest for it.

When the client of a solicitor entrusts money to him to lend to someone else, he retains the **Property** in it until the arrangement

with the borrower is completed. The Property in the money is then transferred directly from the lender to the borrower, without in any way vesting in the solicitor. But when a customer pays in money to his bankers, the Property in it, instantly and *ipso facto*, vests in the banker, and the customer has nothing but a Right of Action against the Person of the banker to demand back an equivalent sum. So long as the money remains in the possession of the customer, it is a *Jus in rem*; but when he has paid it into his account, he has nothing but a *Jus in personam*.

Galiani says (*Della Moneta*, p. 323), "Banks began when men saw from experience that there was not sufficient money in specie for great commerce and great enterprises.

"The first Banks were in the hands of private persons, with whom persons deposited money, and from whom they received Bills of Credit (*fedi di credito*), and who were governed by the same rules as the Public Banks now are. And thus the Italians have been not only the fathers and the masters and the arbiters of commerce; so that, in all Europe, they have been the depositaries of money, and are called Bankers."

So Genovesi says (*Delle Lezioni di Economia Civile*, part ii. ch. 5 § 5), "These Monti were first administered with scrupulous fidelity, as were all human institutions made in the heat of virtue. From which it came to pass that many placed their money on deposit, and, as a security, received Paper, which was called, and is still called, Bills of Credit.

"Thus private Banks (*Banchi*) were established among us, whose Bills of Credit acquired a great circulation, and increased the quantity of signs, and the velocity of commerce."

And this was always recognised as the essential feature of "Banking."

Thus Marquardus says (*De Jure Mercatorum*, Lib. ii. ch. 12, § 13): "And by 'Banking' is meant a certain species of trading in money, under the sanction of public authority, in which money is placed with bankers (who are also cashiers and depositaries of money) for the security of Creditors, and the convenience of Debtors, in such a way that the Property in the money passes to them, but always with the condition understood, that anyone who places his money with them may have it back whenever he pleases."

A "Banker" is, therefore, a person who trades in the same way that the Public Banks did. They acquired the Property in the money paid in, and in exchange for it they gave Bills of Credit, which circulated in commerce exactly like money, and produced all

the effects of money. And, moreover, when they bought, or discounted, Bills of Exchange, they did it exactly in the same way—they bought them by issuing their own **Credit**, and *not* with Money. And experience showed that they might multiply the Bills of Credit several times, exceeding the quantity of money then held, and thus, for all practical purposes, multiply the quantity of Money in circulation.

Thus the essential business of a “**banker**” is to create and issue **Credit** to circulate as Money.

In the neighbourhood of the Royal Exchange, many firms announce themselves as “Money Changers and Foreign Bankers.” Thus they show that they know that Money Changing is not “Banking.” But Foreign Bankers they mean that, in exchange for Money, they will give their customers Bills of Credit on their foreign correspondents.

The following is the true definition of a “Banker”:

“A Banker is a Trader who buys Money and Credits, Debts, Rights of Action, payable at a future time by creating and issuing Credits, Debts, or Rights of Action, payable on demand,” as will be explained more fully shortly.

The issuing of Bills is so essentially the essence of “Banking” that Lord Overstone and Mr. Norman even termed the issuing of Bills of Exchange by merchants “banking expedients” or “banking operations.”

The Mechanism of Banking.

We must now explain how a Banker makes a profit by the money his Customers sell to him.

Suppose that customers pay in £10,000 to their accounts, and cede the absolute property in the money to the banker. It is *Mutuum*, or *Creditum*. The banker buys the Money from his customers, and in exchange for it he gives them an equal amount of **Credit** in his books; that is, he creates Rights of Action against himself to an equal amount, giving his customers the right to demand back an equal amount of money at any time they please, and also the right to transfer their Rights of Action to anyone else they please, exactly as if they were money; and the banker agrees to pay the Transferee the same as his own customer.

This Right of Action, Credit, or Debt, entered in the banker's books, is, in banking language, technically termed a **Deposit** (**Deposit**).

After such an operation, his accounts would stand thus :

LIABILITIES.			ASSETS.	
Deposits . . .	£10,000		Cash . . .	£10,000

Now, though his customers have Rights of Action against the banker to demand an exactly equal sum of money to what they have paid in, yet persons would not pay money to their banker if they meant to draw it out immediately, just as no one would spend all the money he has at once.

Nevertheless, some will want to draw out part of their funds ; but if some customers want to draw out money, others will, probably, pay in about an equal sum. Observation shows that in ordinary and quiet times a banker's balance will seldom differ by more than one thirty-sixth part from day to day.

The banker's cash is, therefore, like a column of gold with a slight ripple on the surface ; and if he retains £1000 in cash to meet any demands which may be made upon him, he has £9000 to trade with and make a profit by, and it is just in the method in which bankers trade that so much misconception exists.

It is commonly supposed that when a banker has the £9000 to trade with, he employs it in purchasing Bills of Exchange to that amount, and that he receives a profit only on the £9000 ; but that is a complete misconception of the nature of **Banking**.

A "*Banker*" never buys *Bills of Exchange with Money* ; that is the business of a bill-discounter, or a money-lender.

The way in which a "banker" trades is this. He sees that £1000 in cash is sufficient to support £10,000 of liabilities in Credit, consequently he argues that £10,000 in cash will bear liabilities to several times that amount in Credit.

One of the most eligible methods of trading for a banker is to buy, or discount, good commercial bills. And he buys these bills exactly in the same way as he bought the Cash ; that is, by creating credits in his books, or Debts, or Rights of Action against himself the amount of the bills, at the same time deducting the Interest, Profit, agreed upon, which is called the Discount.

A "banker," therefore, invariably buys a Bill of Exchange with his own Credit, and never with cash—exactly in the same way as he bought the cash. That is, he buys a Right of Action, payable at a future time, by creating and issuing a Right of Action, payable on demand ; and this Right of Action, or Credit, is also, in banking language, termed a **Deposit**, as the Right of Action created and issued to buy the cash.

Suppose that the banker buys £40,000 of Bills of Exchange three months, and that the agreed upon profit is 4 per cent., the sum to be retained on the bills is £400. Consequently, exchange for bills to the amount of £40,000, he would create an issue Credits, Debts, or Rights of Action — technically termed **Deposits**—to the amount of £39,600.

Hence, just after discounting these bills, and before his customers began to operate upon them, his accounts would stand thus :

LIABILITIES.		ASSETS.	
Deposits	£49,600	Cash	£10,000
		Bills of Exchange . .	£40,000
			<hr/>
			£50,000
		Balance of Profit . .	£400

the balance of £400 being his own Property, or Profit.

By this process, the “banker” has added £39,600, in Credits to the previously-existing cash, and his profit is clear; he has not gained £400 on the £9000 in cash, but 4 per cent. on the £40,000 of bills he has bought.

This is what the business of banking essentially consists in, and thus the correctness of the definition of a “banker” given above is manifest.

Thus a banker does not make advances out of his Deposits, as is so commonly supposed; but he makes all advances by creating Deposits.

Thus the error of Gilbert’s allegation is also seen, that his profits consist in the difference between the interest he pays for the money he borrows, and the interest he charges on the money he lends. His profits depend upon the amount of Credit he can maintain in circulation in excess of the cash he holds in reserve.

Thus we see that the very nature and essence of a Bank and Banker is to create and issue **Credit**, payable on demand; and this Credit is intended to circulate, and perform all the functions of Money.

A Bank is, therefore, not an office for “borrowing” and “lending” Money, but it is a **Manufactory of Credit**. As Mr. Cazenove well said, “It is the **Banking Credits** which are the **Loanable Capital**; and, as Bishop Berkeley said, “**Bank is a Gold Mine.**”

It is usual to speak of the Money Market, and people suppose that Money is lent; but this is wholly erroneous, it should be called the **Credit Market**.

On the Legal Relation between Banker and Customer.

It must be carefully observed that the **Legal Relation** between Banker and Customer is simply that of **Debtor and Creditor**.

When a customer pays in money to his account with his banker, he cedes the absolute property in the money to the banker, and receives in exchange for it a Right of Action, or Credit, or Debt, to demand an equivalent sum of money, at any time he pleases, but not the identical money.

In speaking of banking, it is too often implied that the money placed with the banker still belongs to the customer. But this was decisively refuted by Lord Cottenham, in *Foley v. Hill*, 2 H.L. cas. 28.

It must, therefore, be carefully observed that a banker in no way resembles the treasurer of a public fund, or a solicitor, or a money scrivener, who are only trustees, or bailees, of the money placed with them by their clients. If a banker were the mere trustee of the money placed with him, he would have no right to use it for his own profit.

Persons often say that they have so much money at their banker's; but such an expression is wholly misleading and erroneous. They have no money at their banker's. They have nothing but an abstract Right of Action to demand so much money from their banker, which Right of Action, being exchangeable for money on demand, is of the value of money.

Another consequence of this relation is, that a Cheque is a Bill of Exchange, and not a Draft. It is an order addressed by a Creditor to his Debtor, and not one addressed by a person to his trustee, or bailee. To call a Cheque a Draft is to mistake the relation between Banker and Customer.

On the Method of Utilising Banking Credits.

The banker, then, having issued these Credits, Deposits, or Rights of Action against himself, to his customers, they cannot, of course, transfer them by manual delivery, in that form, to anyone else. In order to be capable of manual delivery, they must be recorded on some material, such as paper.

And this might be done in two forms:—

1. The banker might give his customer his own Promissory Notes, promising to pay a certain sum to his customer, or to his order, or to bearer, on demand.

2. The customer might write a Note to his banker, directing him to pay a certain sum to a certain person, or to his order, to bearer, on demand. These orders were formerly called **Cash Notes**, but they are now termed **Cheques**.

These paper documents do not create new liabilities; they merely record on paper, the Credits, Debts, or Deposits which have already been created in the banker's books, and their sole use is to transfer these Rights of Action to other persons.

There is one juridical distinction between Bank-notes and Cheques. A Bank-note is the absolute obligation of the bank to pay it; a Cheque is only the contingent obligation of the banker to pay it, provided that the customer has funds on his account to meet it. If he has, the obligation of the banker is absolute. The holder of a Cheque, with funds to meet it on the drawer's account, has the same Right of Action against the bank as upon one of his own Notes. So far as regards Economic Bank-notes and Cheques are absolutely identical. They are both equally **Circulating Medium, or Currency**.

When, therefore, a banker has created a Credit, or Deposit, in favour of his customer, he can put this Credit into circulation either by means of the banker's own Note, or by means of his Cheque, and when he does so, the following different results may take place:

1. The customer himself, or the holder of the Note, or Cheque, may demand payment of it: if they do so, the banker's liability is extinguished. It is a resale of money to the holder of the Note, Cheque, and the banker buys up the Right of Action against himself.

2. The Note, or Cheque, may circulate in commerce, and effect any number of transfers of commodities, or payments, exactly like an equal sum of money; and it may ultimately fall into the hands of a customer of the same bank, who pays it into his own account, and the whole series of transactions is finally closed by the mere transfer of Credit from the account of the drawer to that of the holder, without the necessity of any coin.

3. The Note, or Cheque, may, after performing a similar series of operations, fall into the hands of a customer of another bank; the banker becomes debtor to the customer of another bank.

But if the bank A becomes debtor to the customers of bank B, the chances are that about an equal number of the customers of bank A will have about equal claims against bank B; and so among any number of banks. If the mutual claims of the customers

of each bank are exactly equal, the respective documents are interchanged, and the Credits are readjusted among the accounts of the different customers without any payment in money. Thus, if the mutual claims among any number of bankers exactly balanced, any amount of Credits, however large, might be settled without the use of a single coin.

Formerly, if the mutual claims did not balance, the differences only used to be paid in Money or Bank-notes. But now, by the ingenious arrangements of the Clearing House, described elsewhere, the use of Coin and Bank-notes is entirely dispensed with; and all the banks which join in the clearing are really and practically formed into one huge banking institution, for the purpose of transferring Credits among each other, just as Credits are transferred from one account to another in the same bank, without a single Coin or Bank-note being required.

Error of the Common Description of Banking.

From the preceding account of the actual mechanism of Banking, it will be seen what a complete misconception of its nature it is to say that bankers are merely agents, or intermediaries, between persons who wish to lend and those who wish to borrow.

This is entirely untrue in the ordinary sense of "lending" and "borrowing," because, in the ordinary sense of "lending," the "lender" deprives himself of the use of the thing "lent."

But when a person pays in money to his banker, he has no intention of depriving himself of the use of it. On the contrary, he means to have the same free command of it as if he had it in his own house. The customer, therefore, "lends" his money to his banker, but at the same time has the free use of it. The banker employs that money in promoting trade. Upon the strength of having acquired it, he buys Debts with his promises to pay several times exceeding the amount of money he possesses; and the persons who sell him their Debts have the free use of the very same coin, which the lenders have the very same right to demand. Thus the "lenders" and the "borrowers" have the same rights to demand the same coin at the same time. And all banking depends on the calculation that only a certain portion of each set of customers will demand the actual cash, but that the majority will be satisfied with the mere promise to pay, or the Credit.

The whole of this mystery and confusion is cleared away by simply observing that a Bank is merely a shop for the sale of

Credit; and the quantity of Credit which a Bank can create is determined by the ratio of the demand for payment in money compared to the total quantity of Credit created.

Banking entirely depends on the doctrine of chances; it is a species of insurance; it is practically possible that a banker may be called upon to pay all his liabilities on demand at once; just as it is theoretically possible that all the lives insured in an office may drop at the same instant, and it is theoretically possible that all the houses insured in an office may be burned down at the same instant.

A large and sudden demand for money on a bank is termed a **Run**, and a Run upon a Bank is analogous to a pestilence, or a conflagration, to an Insurance Office. But all Insurance and Banking is based upon the expectation that these contingencies will not happen. A banker multiplies his liabilities to pay on demand, and keeps by him a sufficient amount of cash to insure the immediate payment of all claims which are likely to be demanded at one time. If pressure comes upon him, he must sell some of the securities he has bought, or borrow money on them.

Contrast between the Common Notions about Banking and the Reality.

Having now given an exposition of the actual facts and mechanism of Banking, it will be as well to contrast the Common Notions respecting it and the Reality.

I. It is commonly supposed that Bankers are dealers in Money only—that they borrow Money from one set of persons and lend it to another set of persons.

The fact is that Bankers are not dealers in Money; they never lend Money. The sole function of a Banker is to create and issue **Credit**, and to buy Money and Debts by creating and issuing other Debts in exchange for them.

II. It is commonly supposed that Bankers act only as agents, or intermediaries, between persons who want to lend and those who want to borrow.

Bankers never act as agents between persons who want to lend and those who want to borrow. Bankers buy money from some persons, and Rights of Action from others, exclusively with their own Credit, or by creating and issuing Rights of Action against themselves.

III. It is commonly supposed that a Banker's profit consists in

the difference between the interest he pays for the Money he borrows and the interest he charges for the Money he lends.

The fact is that a Banker's profit consists exclusively in the profit he can make by creating and issuing Credit in excess of the specie he holds in reserve. His whole profit consists in the quantity of Debts he can purchase with his Credit.

How Credit is Capital to a Banker.

It is now seen how **Credit is Capital** to a Banker.

Capital is any commodity which a trader deals in and makes a profit by. And what is the commodity which a banker deals in and makes a profit by? He opens his place of business, and has an array of clerks with their desks, ledgers, &c. He then gives notice that he is ready to buy gold from anyone who has it to sell. And what is the commodity with which he buys the gold, and what does he give in exchange for it? His own **Credit**. The commodity he gives in exchange is a Right of Action to pay an equivalent of gold on demand, *i.e.* his own Credit.

He then gives notice that he is ready to buy good Commercial Debts—which are Credits, or Rights of Action—which anyone has got to sell. And what does he buy these Credits, Debts, or Rights of Action with? Again with nothing but his own Credit—with Rights of Action against himself. His own Credit is the commodity with which he buys these other Credits.

The banker charges exactly the same price for his Credit as if it were Money. The only commodity the banker has to sell is his own Credit, for which he charges exactly the same price as if it were Money. His Credit is, therefore, of exactly the same value to him as Money. Hence, he makes exactly the same profit by selling his Credit as if he were selling Money.

Now, as we have seen, Anything which gives a profit is Capital. Hence, as a banker's Credit produces him exactly the same profit as Money would, it is evident that his Credit is Capital to him, just as much as Money is.

Again, Credits, Debts, or Rights of Action, are Goods, Chattels, Commodities, Merchandise.

Now, under the term Circulating Capital, Smith expressly includes the Goods, or Commodities, in shops. The trader buys them at a lower price from one person, and sells them at a higher price to another person, and so makes a profit by them; and thus the goods in the shop are **Capital** to him.

Adam Smith expressly includes Bank-notes, or Banking Credits, and Bills of Exchange, under the term Circulating Capital.

So a banker buys the Goods, or Commodities, termed Credits, Debts, or Rights of Action, from one person—his own customer—and sells them at a higher price to another person, namely, the Acceptor, or Debtor. The Debt the banker buys is increasing in value every day, from the time he buys it, until it is paid off. These Goods, or Commodities, termed Debts in the portfolio of a banker, produce him a profit, just in the same way as the goods, commodities, or merchandise in the shop produce profits to the trader.

Hence the **Bills** in the portfolio of a banker are **Circulating Capital**, exactly in the same way as the goods, commodities, or merchandise in the shop of a trader are **Circulating Capital**.

On the Economical Effects of Banking.

We have now to observe the Economical effects of Banking.

The business of a Bank is not to borrow Money from one set of persons to lend to another—it is to build up a superstructure of Credit on a given basis of bullion, several times exceeding its amount, which Credit is intended to circulate and produce all the effects of Money.

And everyone who has understood the mechanism of Banking has seen that it practically augments the Capital of the country.

Thus John Law, who was, barring his unfortunate and fatal ideas of issuing Paper Money based upon land, the ablest financier of his age, says that the Bank of Scotland, on a basis of £10,000 in Money, was able to maintain £50,000 of its Notes in circulation, which, he says (*Money and Trade Considered*), was equivalent to so much additional Money to the country.

He also says (*Lettres sur les Banques*), “The introduction of Credit, by means of a Bank, augments the quantity of Money more in one year than a prosperous commerce would do in ten”; *i.e.*, by creating Circulating Credit.

So Bishop Berkeley, after proposing many wise queries on Money and Credit, says that a Bank is a Gold Mine, and asks whether it is not the true philosopher’s stone?

Adam Smith, who never had the least experience in practical business, says that a Bank does not increase the Capital of a country.

But Alexander Hamilton, the celebrated financier of the United

States, who had infinitely more knowledge of practical business than Smith, in presenting a Report to Congress on the advantages of founding a National Bank, says :

“The following are among the advantages of a Bank :

“First, the *augmentation* of the active or Productive Capital of a country. . . . It is a well-established fact that Banks in good Credit can circulate a far greater sum than the actual quantum of their Capital in gold and silver. . . . This faculty is produced in various ways.

“(1) A great portion of the Notes which are issued and pass current as Cash are indefinitely suspended in circulation from the confidence which each holder has that he can, at any moment, turn them into gold and silver.

“(2) Every loan which a Bank makes is, in its first shape, a Credit given to the borrower in its books, the amount of which it stands ready to pay, either in its own Notes, or gold or silver at his option. But in a great number of cases, no actual payment is made in either. . . . The same circumstances illustrate the truth of the position that it is one of the properties of banks to *increase the active Capital of a country*. This additional employment given to Money, and the faculty of a bank to lend and circulate a greater sum than the amount of coin, are, to all the purposes of trade and industry, an absolute **Increase of Capital**. Purchases and undertakings in general can be carried on by means of Bank Paper, or Credit, as effectually as by an equal sum of gold and silver. And thus, by contributing to enlarge the mass of industrious and commercial enterprises, banks became nurseries of national wealth—a consequence as satisfactorily verified by experience as it is clearly deducible in theory.”

So J. B. Say says : “If Bills of Credit could replace completely metallic Money, it is evident that a Bank of Circulation veritably augments the sum of National Wealth, because in this case, the metallic wealth becoming superfluous as an agent of circulation, and, nevertheless, preserving its own value, becomes disposable, and can serve other purposes. But how does that substitution take place? What are its limits? What classes of society make their profit of this interest of *the new fund added to the Capital of the nation?*

“According as a Bank issues its Notes, and the public consents to receive them on the same footing as metallic money, the number of monetary units increases.

“If, suppose, it issues one hundred millions in Notes, it will

withdraw, perhaps, forty millions in specie, which it will put in reserve to meet the payments which may be demanded of it. Therefore, if it adds one hundred millions to the quantity of money in circulation, and if it withdraws forty millions from circulation, it is as if it added only sixty millions.

“We wish now to learn what class of society enjoys the use of this **New Capital**.”

Say then goes on to explain how this **New Capital** is employed, and who reaps the benefit of it.

And J. B. Say is the writer who said that those who say that Credit is Capital, maintain that the same thing can be in two places at once !

Gilbart says: “Bankers also employ their own **Credit as Capital**. They issue Notes promising to pay the bearer on demand. As long as the public are willing to take these Notes as gold, they produce the same effects as gold. The banker who makes advances to the agriculturist, the manufacturer, or the merchant, in his own Notes, stimulates as much the productive powers of the country, and provides employment for as many labourers, as if, by means of the philosopher’s stone, he had created an equal amount of solid gold. It is this feature of our banking system that has been most frequently assailed. It has been called a system of fictitious Credit—a raising the wind—a system of bubbles. Call it what you please, we will not quarrel with names ; but by whatever name you please to call it, it is a powerful instrument of production. If it be on a fictitious system, its effects are not fictitious, for it leads to the feeding, the clothing, and the employing of a numerous population. If it be a raising of the wind, it is the wind of commerce, that bears to distant markets the produce of our soil, and wafts to our shores the productions of every climate. If it be a system of bubbles, they are bubbles which, like those of steam, move the mighty engines that promote a nation’s greatness and a nation’s Wealth.”

What Gilbart says about Notes is all true ; but he omits to mention that Banking Credits circulated by means of Cheques have exactly the same effects as Banking Credits which are circulated by Notes.

On John Stuart Mill’s notions on Banking and Currency.

We are now constrained to examine the dogmas of John Stuart Mill on Banking and Currency, not from any love of controversy, which we cordially dislike, but simply because Mill’s work is the

one which is still usually put into the hands of unfortunate students of Economics.

Mill says (*Preliminary Remarks*): "Further consideration showed that the uses of Money are in no respect promoted by increasing the quantity which exists and circulates in a country, the service which it performs being as well rendered by a small as by a large aggregate amount."

This certainly is somewhat startling doctrine. If only a certain amount of work could be done, there would be something true in it. But in almost all countries, is it not possible to develop new work and new industry by introducing new Capital? According to this dogma, the introduction of new Capital into a country can do it no service. But do not facts everywhere rise up in contradiction to such a dogma? It is usually supposed that the very thing which poor countries want is the introduction of new Capital. Of course, if the introduction of new Capital can do no good, the withdrawal of Capital can do no harm.

How could the colossal commerce of England be carried on without the thousands of millions of Credit in the form of Bills of Exchange, Bank Credits, and Trade Credits? Does any sane man suppose that the present commerce of England could be carried on if all the forms of Credit, which every Economist of repute knows perfectly well is equivalent to an augmentation of so much money, were annihilated, and nothing but the paltry amount of gold and silver left?

Has not the prodigious increase of the Wealth of Scotland, during the last 150 years, been mainly due to the Cash Credits of the Scotch Banks? And the same is true, in a lesser degree, of Ireland. Have not most of the Indian railways been constructed mainly by the supplies of British Capital poured into the country? Is not every country in the world clamouring for British Capital? Even in the United States, have not vast amounts of enterprise been developed by British Capital? If the Scottish system of Banking could be gradually and cautiously introduced into India, it would give a prodigious stimulus to the Wealth of India; and, perhaps, even render her independent of British Capital.

Mill again says (Bk. III. ch. 13, §6), "Another of the fallacies from which the advocates of an inconvertible Paper Currency derive support, is the notion that an increase of the Currency quickens industry. The idea was set afloat by Hume, in his essay on Money, and has had many devoted adherents since."

Have not the prodigious creations of Credit quickened industry in Scotland and every country?

Anyone who had the least experience of practical business, and will study the practical effects of Banking, knows that it is a fallacy at all that an increase of Capital, either by the introduction of fresh Money, or by the creation of Credit within legitimate limits, quickens industry. But, of course, this does not mean Credit without limit; but Credit created within certain strictly defined scientific limits.

Mill's dogmas would certainly not meet with acceptance from statesmen, nor from practical men of business.

Mill further says (Bk. III. ch. 22, § 2), "A banker's profession being that of a **Money-lender**, his issue of Notes is simply *Extension* of his ordinary occupation."

We have shown that it is a total misconception of the nature of the business of Banking to say that it consists in **Lending Money**. The business of a banker consists in buying Money and Debts by creating other Debts, which will exceed several times the amount of Cash he holds; which may be circulated either by means of Notes, or Cheques, and are equivalent, in respects, to the creation of an equal amount of Money.

Issuing Bank-notes, therefore, is not an *extension* of a banker's ordinary business. Formerly, banking was defined to consist in issuing Notes. In the present day Cheques have, to an immense extent, superseded Notes. The very essence of Banking is to create Credit; and whether these Credits are circulated by means of Notes, or Cheques, in no way alters the nature of Banking, which is a pure matter of convenience.

Mill then says (Bk. II. ch. 13, § 1): "But if the Paper Currency is convertible, Coin may still be obtained from the issuers in exchange for Notes. *All additional Notes, therefore, which are attempted to be forced into circulation after the metals have been completely superseded will return upon the issuers in exchange for coin.*"

He also says (Bk. III. ch. 22, § 3): "When metallic money has been entirely superseded, and expelled from circulation by the substitution of an equal amount of Bank-notes, any attempt to keep a still further quantity of Paper in circulation must, if the Notes be convertible, be a complete failure. The metals would, as before, be required for exportation, and would, for that purpose, be demanded from the Banks to the full extent of the superfluous Notes, which thus could not possibly remain in circulation."

The preposterous folly of these dogmas is shown by the fact that

when the Bank of Scotland was founded, although it was the only Bank in Scotland, upon a deposit of £10,000 in money by its shareholders, it was able to maintain £50,000 of its Notes in circulation, which John Law says justly was equivalent to an augmentation of the money of the country.

At the present day, the English Joint Stock Banks usually keep a reserve of about one-tenth in cash to support the circulation of their Credits, and they have about £800,000,000 of Deposits, or Bank Credits.

But in Scotland, where the system of Credit is more perfectly and highly organised than in England, the Bankers only find it necessary to keep cash to the one twenty-second part of their Credits in various forms. Upon a reserve of cash of about £4,500,000 they maintain a circulation Credits exceeding £92,000,000.

According to Mill's dogmas, such a state of things would be impossible; but all the Credit created in excess of the cash held would at once return upon the Banks for payment! This shows the folly of men writing books, and setting themselves up as guides upon matters of which they do not take the least pains to inform themselves.

Mill then says (Bk. III. ch. 13, § 5): "The substitution of Paper or Metallic Currency is a national gain; any further increase of Paper beyond this is a form of Robbery!"

"An issue of Notes is a manifest gain to the issuers, who, until the Notes are returned for payment, obtain the use of them as if they were real Capital, *and so long as the Notes are no permanent addition to the Currency*, but merely supersede gold or silver to the same amount, the gain of the issuers is a loss to no one; it is obtained by saving to the community the expense of the more costly material. But if there is no gold and silver to be superseded—if the Notes are added to the Currency, instead of being substituted for the metallic portion of it—all holders of Currency lose by the depreciation of its value the exact equivalent of what the issuers gain."

Now, how is it possible for a Banker to make a profit by issuing Notes if he is obliged to keep an exactly equal quantity of gold? How, on such a system, is the community saved the cost of the more costly material? No Bank ever constructed on this principle ever did, or by any possibility could, make profits.

Now, Mill asserts that for a Banker to create Credit in excess of the cash he holds is Robbery!

But all profits in Banking are made by creating Credit in

excess of cash. Therefore, all profits made in Banking are **Robbery!**

Therefore, all Bankers are **Robbers!** Certainly Mill is an Economist who ought to be very popular among bankers.

But if it is Robbery for bankers to create Credit in excess of the gold they hold, it must be equally robbery for merchants to create Credit in excess of the gold they hold.

Now merchants create Credit, not because they have gold at the time they create it, but because they expect to be in possession of gold, or its equivalent, at the time the bill falls due.

We have shown that John Law, Say, Hamilton, Gilbart, and all persons practically conversant with the mechanism of banking, declare that a Bank, by maintaining in circulation a quantity of Credit in excess of the cash it holds, creates for all practical purposes an augmentation of the Capital of the country.

But Mill declares that it is **Robbery!**

Such is the beautiful harmony of doctrine among Economists!

BILL OF EXCHANGE.

A written **Order** from one person to another who **owes**, or appears to owe, him money as a **Debtor**, directing him to pay absolutely and at all events: (1) a certain sum of money; (2) to a certain person; (3) at a certain event, is, in modern language, termed a **Bill of Exchange**, or shortly a **Bill**.

It is one form of Incorporeal Property; it is a *Jus in personam*, and is termed in law a **Valuable Security**.

The following is the usual form of a Bill of Exchange:

£250:10:6.

London, May 4, 1895.

Three months after date pay to A. B., or to myself, or order, the sum of Two hundred and fifty pounds ten shillings and sixpence, for value received.

To Mr. John Cox, 993, Strand, London.

William Smith.

Bills of Exchange play such an important part in modern commerce and Economics, and are so little understood by literary persons who write on Economics, that it is necessary to say somewhat about them.

Bills of Exchange, then, like all other forms of Credit, are mere abstract Rights of action against a person. They are not titles to

any specific sums of money. It is the fundamental requisite of a Bill of Exchange that it should not be made payable out of any particular fund. An order payable out of a specified fund is a Draft (**Draft**).

Bills of Exchange, then, like all other forms of Credit, being purely abstract Rights of Action, are themselves vendible commodities, just like money or any other material chattels. They are termed *Pecunia*, *Bona*, *Res*, *Merx*, in Roman Law ; χρήματα, πράγματα, ἀγαθά, οἶκος, οὐσία, &c., in Greek Law ; and Incorporeal Property, Incorporeal Wealth, merchandise, vendible or marketable commodities in English Law. And the whole aggregate mass of Credits in every form have value for exactly the same reason that anything has value, because they are exchangeable for money.

A whole series of writers have shown that Credits of all forms are exactly of the same nature, and are only an inferior form of money (**Money**). A Credit is a Right of action, or a claim against some single individual, while money is a general claim on the whole trading community. Credit, then, in all its forms is an integral and enormous portion of the Circulating Medium or Currency, and its effects on circulation and prices are exactly the same as those of an equal quantity of money.

When a trader has bought goods on Credit, and given a Bill at three months in exchange for them, the goods become absolutely his property, just as if he had paid for them in money ; and as it is a fundamental principle of mercantile law that a person who is only bound to pay a sum at a future date is not in debt at the present time, a trader who has bought goods on a three months' Credit is not in debt till the day of payment has come.

Bills of Exchange, then, being vendible commodities, there are two classes of traders, bankers and bill discounters, or money lenders, whose business it is to buy them, and make a profit by so doing, just as ordinary traders buy goods from merchants or wholesale dealers, and make a profit by selling them to their customers. The Bills of Exchange in the portfolio of a banker are circulating capital, just in the same way as the goods in the shop of an ordinary trader are termed, by Adam Smith, circulating capital.

Bills of Exchange then, as well as all other forms of Credit, are separate and independent entities or merchandise, and are bought and sold independently, just as any other merchandise is.

It is upon this rock that literary Economists, who are ignorant of the most elementary principles of Mercantile Law, founder when they meddle with the subject of Bills of Exchange.

Thus when a good many years ago I said that Credit may be used as capital, in accordance with Adam Smith, J. B. S. J. S. Mill, and hosts of other writers, Roscher, Rector of University of Leipsig, applied several disparaging epithets to me as superficial, and kindly pointed out to me that Bills of Exchange could not be independent commodities, because they were mere titles to a sum of money, which statement of the Rector would be saluted with rounds of merriment from any junior class students in Mercantile Law.

This fundamental error also appears conspicuously in Stanley Jevons' *Investigations in Currency and Finance*, p. 31. He says: "What greatly assists a rise of prices, started in a period of investment, is the system of Credit on which trade is necessarily conducted. By this system *a trader is not obliged to be the owner of the goods in which he trades* [how could he trade in them if he were not their real owner?], but may buy freely by giving promise of payment in, perhaps, three months' time. *Thus the goods really belong to the holder of his promissory note, or bill.* . . . Though the merchant does *not own the goods, there must be some one who owns them*, to advance capital, or, as it is said, to discount bills arising out of the transaction."

That is, Stanley Jevons implies that the goods really belong to the banker who discounts the bills arising out of their sale. The fatuity of such a doctrine is patent, and its error was long pointed out by Thornton. Every banker would laugh at such a doctrine, and say that the person who uttered it was not fit to write on Economics. How could the trader absolutely sell goods to other persons if he were not their actual proprietor? If a wholesale trader buys goods and sells them to a multitude of retail dealers, and these retail dealers sell them to a multitude of customers. How can the banker, who holds the bills, follow the goods into the hands of multitudes of customers? Very probably the goods have been consumed long before the bills given for them become due and payable. And how can the banker follow the goods after they have been annihilated?

Thus the fatuity of the doctrine of Stanley Jevons, and of many other literary dreamers, is apparent at once.

We have said enough to correct the ordinary blunder made by literary dreamers, who have no knowledge of the subject they write about. If any readers are curious about the history and principles and mechanism of the system of Bills of Exchange we may refer them to our *Theory of Credit*.

BILL OF LADING.

A Bill of Lading is a *Jus in rem*. When a person ships goods on board a vessel, the captain gives him a written receipt for the goods, which is entitled a Bill of Lading. The consignor may send this Bill of Lading to the consignee, who thereby becomes entitled to those specific goods. The Bill of Lading may also be transferred by indorsement any number of times, just like a Bill of Exchange. The indorsee of the Bill becomes the actual proprietor of the goods and may sue for them. Several literary Economists, seeing that Bills of Lading and Bills of Exchange may be transferred by indorsement exactly in the same way, have considered them as similar instruments, and classed them both as Credit. But this is a vital error. Bills of Lading are titles to specific goods and to no others. The captain has no property in the goods, he is merely their bailee or trustee, and all he has to do is to deliver them to their real owner. Bills of Lading are not Credit. But Bills of Exchange are not titles to any specific sum of money. They are merely abstract Rights to demand a sum of money from some person. They are, therefore, *Jura in personam*, or Credit.

CAPITAL.

Adam Smith's use of the word **Capital** strikingly exemplifies the defect of his definitions.

He enumerates as Capital (1) Material things, (2) Personal Qualities, (3) Abstract Rights, such as Bank-notes, Bills of Exchange, &c., which are **Credit**. That is, he enumerates all the three orders of Economic Quantities as Capital.

But when we are told that all these things are Capital, we have no more notion of what Capital is than if we were told that they are all **Abracadabra**.

We do not want an enumeration of what things are Capital, but we want a **Definition** of what Capital is.

The word Capital is derived from the Latin *Caput*, which means the source of a spring, or the root of a plant, namely, the source from which any increase springs.

Thus Horace says, Od. I. 1 : "Lene caput aquæ."

So Plautus says : "O scelerum caput !" "Oh, source (or fountain) of crimes."

“Perjurii caput !” “*Oh, fountain of perjury.*”

Stephen, in his Thesaurus, thus defines the word :

“Κεφάλαιον. Caput unde fructus et reditus manat.”

“**Capital.** *The source from which any Profit or Revenue flows.*”

So Senior says : “Economists are agreed that **Whatever** gives a Profit is properly termed Capital.”

So de Fontenay says : “Wherever there is a Revenue you perceive **Capital.**”

This is a good general definition of Capital, and the “Whatever gives a Profit” must be interpreted in as wide and general a sense as the “Anything whose Value can be measured in Money” is in the general definition of Wealth.

The definition of Capital is, therefore, this :

“*Capital is any Economic Quantity used so as to produce a Profit.*”

Any Economic Quantity whatever may be used as Capital.

Aristotle pointed out that any Economic Quantity whatever may be used in two different ways.

1. The proprietor may use it for his own personal enjoyment.
2. He may trade with it, or he may use it so as to produce a Profit.

When any Economic Quantity whatever is traded with, *i.e.* used so as to produce a Profit, it is termed **Capital**.

Economic quantities, it has been shewn, are of three distinct orders (**Wealth**): (1) Material Things; (2) Personal Qualities, both in the form of Labour and Credit; (3) Abstract Rights.

And each of these Quantities may be used in either of the above ways.

Material Things used as Capital.

Suppose that a person has a sum of money—if he expends it on his own personal gratification, or on household expenses, such Money is not used as Capital, because he makes no profit by it.

But if he lends it out at interest, or if he buys goods with it for the purpose of selling them again at a profit, or if he buys into the Funds or the Shares of any commercial company, then he uses his Money as Capital; and the goods also are Capital, because he intends to sell them again at a profit; and the Funds and the Shares also are Capital, because they produce him an annual revenue.

So if the owner of land lives on it himself, and uses it for his own personal enjoyment, he does not use the land as Capital.

But if he lets it out to farmers, or to builders to build houses upon, and receives a Rent for so doing, then he uses the land as Capital.

Some great noblemen possess large tracts of land, upon which part of London is built; that land yields them enormous revenues, and, therefore, it is Capital to them.

And so any material thing whatever may be used as Capital.

So if a person spends Money merely on a general education, of which he makes no profitable use, that Money is not used as Capital.

But if he spends his Money in acquiring a professional education, such as that of a schoolmaster, an advocate, a physician, a surgeon, or any profession by which he intends to earn an income, then he uses that Money as Capital.

And the professional knowledge which he has acquired is Capital to him, because he makes an income by trading with it.

Personal Qualities used as Capital.

Personal Qualities may also be used in both ways; but Personal Qualities are of two forms. They are of the form (a) of Labour and (b) of Credit.

Personal Qualities as Labour.—If a man digs in his own garden for his amusement, or if he sings, acts, or gives lectures for the delectation of his friends, such Labour is not used as Capital.

But if he sells his Labour in any way for Money, then he uses his Labour as Capital.

Thus Huskisson said, "He had always maintained that Labour is the poor man's Capital."

So Mr. Cardwell, speaking to his constituents, said, "Labour is the poor man's Capital."

So a writer in a daily paper said, "The only Capital they possess is their Labour, which they must bring into the market to supply their daily wants."

And speaking of them, the *Economist* said, "They have no Capital but their Labour."

So Froude said, in *Oceana*, "And the land would be within the reach of poor men, who have no Capital except their Labour."

So his knowledge, skill, and abilities are Capital to anyone who earns an income as an advocate, physician, actor, engineer, or as

manager of a great commercial company, or in any other profession. His services are wanted, demanded, and paid for by his clients; their Value is measured in money; hence they are χρήματα, or Wealth; and as he makes an income by their employment, they are Capital.

This income is measurable and taxable, just as if he made an income by selling corn, cattle, or any other material chattels.

All modern writers admit that Labour is a marketable commodity, which can be bought and sold like any material chattel, and consequently it is Wealth, as the author of the dialogue *Eryxias* was the first to point out; and as a person can sell his Labour for a profit, and make an income thereby, it may be used as Capital.

Personal Qualities as Credit.—As Mill, expressing the unanimous doctrine, said, "Everything which has Purchasing Power is Wealth"; and as Credit is Purchasing Power, it follows that Credit is Wealth. A merchant's, or a banker's, or a trader's Purchasing Power is his Money *and* his Credit; hence, by the above definition, his Money and his Credit are equally Wealth.

Personal Credit may be used in two ways. If a person buys goods on Credit for his own enjoyment, as for household use, such Credit is not used as Capital.

But a merchant may use his Credit for the purpose of Profit, and therefore as **Capital**.

He may use it for the purpose of purchasing goods or materials, or in employing Labour, by giving a Promise to pay at a future time, instead of actual money. He sells the goods, and makes a profit by so doing, just as if he had paid for them in money.

Or he may employ Labourers, by means of his Credit, and sell the products for more than they cost, and so make a Profit. In these ways he uses his **Personal Credit as Capital**.

When Personal Qualities, either in the form of Labour or Credit, are used in this way to produce a profit, they are termed **Personal Capital**.

Abstract Rights and Rights of Action as Capital.

When Personal Credit is used as a Purchasing Power, a Right of Action, or an Economic Quantity of the third order, is created. And as this Right of Action may be bought and sold, or exchanged like any material chattel, it is a **Marketable Commodity (Credit)**. The traffic in these Rights of Action is the most colossal branch

modern commerce. It is in buying these Rights of Action that the business of Banking consists, as is fully explained under **Credit and Banking**.

But any other Right may be used as Capital. If a man buys the Funds, or Shares, in a Commercial Company, or Municipal or other Obligations, such as Railway Debenture Stock, all these, and many other classes of Rights, produce him a profit; hence they are **Capital** to him.

So the Copyright of a successful work is Capital to the author; and if he sells it to a publisher, it becomes fixed Capital to him.

So if an ingenious inventor devises a successful machine, the Patent of it is Capital to him; and he can sell the Patent to a capitalist, or a company, who make a profit by it, and it then becomes fixed Capital to them.

So if a trader establishes a successful business, its **Goodwill**, or the Rights to receive its profits, is part of his Capital, and he can sell the Goodwill of it to another trader, and then it becomes Capital to him.

So if a Professional man, such as a doctor, or a solicitor, or any other, establishes a successful business, the **Practice**, or the Right to receive the expected future profits from his patients and clients, is Capital to him, and he may sell the Practice to any other professional man, and it becomes Capital to him.

There is a class of traders whose especial business is to buy and sell **Rights**—such as Shares in all kinds of Commercial Companies, and Public Securities of all sorts. They keep a stock of this kind of Property on hand, just as other traders keep a stock of material goods, and make a profit by buying and selling these various Rights. These persons are termed Stock-jobbers, and these various Rights are floating Capital to them, just as material chattels are to an ordinary trader.

Capital may Increase in Two distinct ways.

Capital may increase in two fundamentally distinct ways:—

1. By actual increase of **Quantity**, as cattle, flocks, and herds, and all the fruits of the earth increase by adding to their number or Quantity.

2. By **Commerce**, or **Exchange**; that is, by exchanging away something which has a certain value in a place, and obtaining something in exchange for it which has a higher Value in that place.

Money is used as Capital, and produces a profit, by the second

manager of a great commercial company, or in any other profession. His services are wanted, demanded, and paid for by his clients; their Value is measured in money; hence they are χρήματα, or Wealth; and as he makes an income by their employment, they are Capital.

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better off by £20 at the end of the operation than he was at the beginning, and thus he has used his **Credit as Capital**.

Hence he has made a profit by his Credit equally as by his Money. Hence, by the very definition, his **Credit** has been **Capital** to him, and it has produced exactly the same circulation of commodities that Money would have done.

Hence it is clear that **Credit is Productive Capital**, exactly in the same way and in the same sense that Money is.

Thus we see how a clear and distinct understanding of definitions removes all doubts and difficulties. Many persons have found it very hard to understand how Credit can be Capital. But that entirely depends on the definition of Credit, and the definition of Capital. When it is agreed that **Everything** which has Purchasing Power is Wealth, all difficulty vanishes. Because Money is purchasing power, and also Credit is purchasing power, a trader's Purchasing Power is his Money *and* his **Credit**. Therefore, his Money and his Credit are equally Wealth.

And as we have seen that the definition of Capital is "Anything which produces a profit," and that a trader makes a Profit equally by his Money and Credit, it necessarily follows that he may use his Money and his Credit equally as **Capital**.

Thus the expression that "Credit is Capital," which has called forth so much dissent in recent times, simply means that commerce is carried on by means of Credit, by Bank-notes, Cheques, Bills of Exchange, and other instruments, as well as by Money.

If Money be termed Positive Capital, Credit may be termed Negative Capital.

A merchant's Wealth or Purchasing Power consists of his Money, his Rights to demand Money—*i.e.* the Bank-notes, Cheques, Bills of Exchange, or other Securities he may possess—and his Credit, *i.e.* his Right to the future products of his industry.

If he buys goods with his Money, and sells them with a profit, he first replaces the sum he has expended, and the surplus is his profit.

If he buys goods with his Credit, he creates a Debt against himself; when he sells the goods, he first discharges the Debt he has incurred, and the surplus is his profit.

In either case his Profit consists in the excess of his Property, at the end of the operation, above what it was at the beginning.

Now, as Senior says, "Economists are agreed that whatever gives a profit is properly termed Capital."

If he buys with Money, he makes Capital of the realised Profits of the **Past**; if he buys with Credit, he makes Capital of the *expected* Profits of the **Future**.

In each case he makes a Profit; hence, by the Definition, Money and Credit are equally Capital, but they are **Inverse**, or **Opposite** to each other. Hence, if Money be termed **Positive Capital**, Credit may be termed **Negative Capital**.

The meaning of Capital, as denoting anything by which a profit can be made, is constantly used in the common language of politics. It is scarcely possible to take up a newspaper without seeing it said that one party or another makes Capital out of such and such an event. Thus, where one party in the State makes an error, the other party is said to make "Capital" of it; *i.e.* turn it to their own profit. Or when the Government achieves a great military or political success, it is said to make "Capital" of it; *i.e.* turn it to its own profit.

Thus Cobden said in a letter: "They have traded for the last fifteen years as a political party on the Irish question, but now that Capital is exhausted."

Hence *Capital is anything whatever which a person trades with, and makes a profit by.*

There is no such thing as Absolute Capital.

It has been shown that there is no such thing as Absolute Wealth; that is, there is nothing which is in its own nature Wealth, and that whether anything is Wealth or not, depends entirely on human wants and desires.

So also it must be carefully observed that there is no such thing as **Absolute Capital**.

As Mill justly observes, the distinction between Capital and non-Capital does not lie in the **kind** of commodity, but in the **Mind** of the owner. That is, that whether anything is Capital or not, in no way depends on the **Nature** of the thing itself, but solely and exclusively on its **Method of Use**.

Many writers, from an imperfect consideration of the subject, say that Capital is simply the accumulation of the products of past labour. But this is a vital error, which must be carefully guarded against. Because all the accumulated products of past Labour are not Capital, but only that portion of them which is traded with, or used for the purposes of profit.

Moreover, many things may be used as Capital which are in no

way the accumulated products of past labour. As Senior says : "Economists are agreed that *Whatever* gives a profit is properly termed Capital." Now it has been shown that *any* Economic Quantity may be used as Capital. Not only may many material products be used as Capital which are not the products of past labour, such as the land, but Personal Qualities, both in the form of Labour and Credit, may be used as Capital. Now, How is Labour itself the accumulated product of past Labour? How is Personal Credit the accumulated product of past Labour? Also Incorporeal Quantities may be used as Capital, or for the purposes of profit, as well as any material chattels. Banking Credits, Bank-notes, Cheques, Bills of Exchange, &c., may all be used as Capital, and how are they the accumulated products of past labour? In fact, in this great civilised country the enormously greater amount of Capital is purely Personal and Incorporeal.

Some statisticians, indeed, endeavour to estimate the amount of Capital in the country. But it is evident that such attempts are wholly futile. How can they form any estimate of the amount of Capital unless they tell us what they reckon as Capital? Because it is utterly impossible to estimate the amount of Economic Quantities which are being used as Capital at any given instant. The very same Quantity may be used as Income at one instant, and as Capital at the next. And it has been shown that persons trade with, and make Capital of, not only the realised profits of the past, but also the **Expected Profits of the Future.**

On Fixed and Floating or Circulating Capital.

We have seen that there is no such thing as Absolute Capital.

But Capital itself may be used in two different ways :

1. The Capitalist may retain the object used as Capital in his own possession, and make a continuous series of profits by its use. Consequently the Capital, supposing it to be worn out, is only replaced with the profits in a series of instalments. Capital used in this way is termed **Fixed Capital.**

2. The Capitalist may part with it entirely, and replace the value of the Capital with a profit in one operation. Hence it goes away from him entirely, and is replaced in one operation. Capital used in this way is termed **Floating or Circulating Capital.**

It must be clearly understood that it is entirely according to the intention of the person who uses it, and the purpose and method in which it is used, that it receives either of these denominations.

The same article may be Floating Capital in the hands of one person, and Fixed Capital in the hands of its next possessor, if the first produces it for the purpose of selling it outright, and the next purchases it, and retains it in his own possession, and only makes a profit by its continuous use.

This distinction is often overlooked, and the term Fixed Capital is applied to articles of a certain nature, and the term Floating or Circulating Capital to articles of another nature ; but this is very erroneous.

Thus Smith enumerates four kinds of Fixed Capital :

1. The useful machines and instruments of trade, which facilitate and abridge labour.
2. Buildings used for purposes of profit, both by their proprietors and by those who pay rent for them for trading purposes.
3. Improvements in land.
4. *The Acquired and Useful Abilities of all the members of the Society.*

This enumeration is imperfect, because Smith omits all that stupendous mass of Incorporeal Property which has increased to such a gigantic extent in modern times.

Thus, if a person invests his money in the Funds, or in the Shares of a Commercial Company of any sort, or in Railway Debentures, or in Municipal Loans, or in the Obligations of other public bodies, or in purchasing the Goodwill of a Business, or in a Professional Practice, or in Copyrights or Patents, or in any Incorporeal Property which yields a revenue ; all these are **Fixed Capital**.

Smith also enumerates four kinds of Floating, or Circulating, Capital :

1. The Money by means of which the other three are circulated and distributed to their proper consumers.

Under the term Money he includes Bank-notes, and of course Cheques, Bills of Exchange, and other Securities for Money. But all these paper documents are merely Rights of Action or Credits ; hence Smith expressly includes Credit under the term Floating, or Circulating, Capital.

2. The stock of provisions in the hands of the farmers, graziers, butchers, corn merchants, brewers, &c.

3. The materials in the hands of different workpeople to be made up, clothes, furniture, &c.

4. The work which is made and completed, but still remains in the hands of the merchants and manufacturers, but not yet disposed

of, or distributed to the proper consumers, such as the finished work in the shop of the smith, cabinet maker, goldsmith, jeweller, china merchant, &c.

This enumeration is also imperfect because, as before, Smith has omitted all that mass of Incorporeal Property which, as we shall show, may be used as Floating and Circulating Capital, as well as material chattels.

It must be carefully observed that Smith's distinction between certain articles as absolutely Fixed Capital, and other articles as absolutely Circulating Capital, is to a great extent erroneous.

If a person buys land for the purpose of farming it himself, or of letting it out to farmers, or if he buys or builds houses for the purpose of letting them out to tenants, then such land or houses are Fixed Capital.

But it is quite common for speculators to buy up land and build houses for the express purpose of selling them again, and so recouping their outlay in one operation. In the hands of such speculators, land and houses so treated are **Circulating Capital**.

Some manufacturers build engines, which are sold to railway companies; or agricultural implements, which are sold to farmers; or machinery, which is sold to manufacturers. In the hands of the makers, these engines and machinery are **Floating, or Circulating, Capital**, because they are made for the purpose of being sold outright, and so changing hands, and their whole price and profit is reaped in one operation. When they come into the hands of the railway companies, the farmers, and the manufacturers, they become **Fixed Capital**, because they remain in the possession of their owners, who only recoup themselves gradually for their wear, tear, and deterioration in a continuous series of profits.

So a shipbuilder builds ships, and sells them to a shipping company. In the hands of the builder these ships are **Floating Capital**; in the hands of the company they are **Fixed Capital**. And so many other instances might be quoted.

On the other hand, many articles which are generally used as Floating Capital may become Fixed Capital. Furniture, clothes, and plate are usually Floating Capital, because they are usually made for the purpose of being sold.

But sometimes they are retained in the hands of their owners and let out for hire, and then they become Fixed Capital.

There is a class of traders named Stock Jobbers, who buy Stocks and Shares and Public Securities with the intention of selling them again with a profit, just as other traders buy and sell material goods.

In the hands of these Stock Jobbers these Stocks, Shares, and Securities are **Floating Capital**. But other persons buy these Stocks, Shares, and Securities as a permanent investment, and in the hands of such persons they are **Fixed Capital**.

Another class of traders, named Bankers, make a special business of buying Debts; *i.e.* discounting Bills of Exchange. The Bills in the portfolio of a banker are exactly like the goods in the shop of a trader. The banker buys Bills of Exchange, which are merchandise, or commodities, from one set of persons, his own customers, and sells them at a higher price to other persons, namely, the acceptors, and so makes a profit. Hence the Bills in the portfolio of a banker are Floating Capital, exactly as the goods in the shop of a trader are.

It is, therefore, incorrect to apply the terms Floating, or Fixed, Capital absolutely to any articles, whatever their nature may be, unless we know the method in which their owners employ them. And unless an object is incapable of being applied to more than one of these purposes, it is not correct to call it by either name absolutely.

There are very few things to which the name of Fixed Capital may be invariably applied. The only class of Economic Quantities which are invariably Fixed Capital are Personal Qualities. Persons cannot divest themselves of their qualities; they can only make an income by their use. They are, therefore, necessarily Fixed Capital.

So persons do not make a business of buying and selling Copyrights, Patents, and the Practices of Professions. Therefore, these commodities are always Fixed Capital.

On the other hand, Money and all articles of Consumption, such as corn, wine, oils, coals, meat, &c., are necessarily **Floating Capital**, because it is not possible to make a profit by them except by absolutely parting with them.

Almost all other property is capable of being employed in either way at the will of the owner, and, therefore, is Fixed, or Floating, Capital, according to the method in which it is used.

Ricardo on Fixed and Floating Capital.

The distinction between Fixed and Floating Capital by Adam Smith is perfectly clear, distinct, and philosophical, and leads to very important consequences. Ricardo has thrown the subject into confusion by saying: "According as Capital is rapidly

perishable, and requires to be frequently reproduced, or is of slow consumption, it is classed under the heads of Circulating or of Fixed Capital." (Chap. I. sect. iv.) Thus Ricardo not only completely mistook the principle of Smith's distinction, but made one of his own, which is utterly useless and unphilosophical, and in direct violation of the *Law of Continuity*. Because at what degree of perishability does the product change its nature from being Fixed to being Floating Capital? Ricardo's illustrations are also equally unphilosophical. Thus he says that a brewer, whose buildings and machinery are valuable and *durable*, is said to employ a large portion of Fixed Capital; but a shoemaker, whose capital is chiefly employed in the payment of wages, which are expended on food and clothing, commodities more *perishable* than buildings and machinery, is said to employ a large portion of his capital as Circulating Capital. It is evident that the reason why a brewer's buildings and machinery are Fixed Capital, is that they remain his possession, and he derives an income from their continuous use; and the shoemaker's wages, food, and clothing are Circulating Capital, because he parts with the property in them, and they are replaced in one operation in the price of the product. The distinction has nothing whatever to do with the relative durability of the articles. We need not enter further into other illustrations mentioned by Ricardo, of his distinction between Fixed and Circulating Capital, because it is entirely unphilosophical and untenable, and leads to many fallacious consequences.

Mill's Four Fundamental Propositions on Capital.

Mill has laid down what he terms four fundamental propositions respecting Capital, which we must now examine. These propositions are :

1. That Industry is limited by Capital.
2. That all Capital is the result of saving.
3. That although saved, and the result of saving, all Capital is, nevertheless, consumed, *i.e.* destroyed.
4. That what supports and employs Productive Labour is the Capital expended in setting it to work, and not the demand of purchasers for the produce of the labour when completed. Demand for commodities is not demand for labour.

Mill's first proposition that Industry is limited by Capital is taken from Smith, who says : "The general industry of the society never can exceed what the Capital of the society can employ. As the

number of workmen that can be kept in employment by any particular person must bear a certain proportion to his Capital, so the number of those that can continually be employed by all the members of a great society must bear a certain proportion to the whole Capital of that society, and never can exceed that proportion. No regulation of commerce can increase the quantity of industry in any society beyond what its Capital can maintain."

To this we may observe that Smith himself expressly says that trade can be extended in proportion to the stock *and the Credit* of the trader. Furthermore, he classes Bank-notes, Bills of Exchange, &c., under the title of Circulating Capital.

Now, in modern times, nineteen-twentieths, or probably it would be far nearer the truth to say that ninety-nine-hundredths, of industry is carried on by different forms of Credit. Unless Credit be admitted to be Capital, this proposition is entirely false; if Credit be admitted to be Capital, it may be allowed to be true.

With respect to the second proposition, that all Capital is the result of saving, it is entirely erroneous.

Land may be used as Capital; and how is land the result of saving? Personal Credit may be used as Capital; and how is Personal Credit the result of saving? Stocks, Shares, and Public Securities of all sorts may be used as Capital; and how are they the result of saving? This proposition is, therefore, not only not fundamental, but it is absolutely erroneous. It is only some Capital that is the result of saving.

The third proposition that, although saved and the result of saving, all Capital is, nevertheless, consumed, *i.e.* destroyed, is, if possible, even more erroneous.

The Duke of Bedford, the Duke of Westminster, and other great lords are the proprietors of vast districts of ground upon which London is built. This ground yields them enormous revenues; it is therefore Capital to them. How is it the result of saving? How is it consumed?

The great Joint Stock Banks of England and Scotland and other Bankers trade exclusively by means of their Credit. Every writer in the world, who knew what he was writing about, has fully understood and said that the Credit of a Bank is Capital to it, and, indeed, is its only Capital, because it makes all its purchases and profits by issuing its Credit; its Credit is the commodity it deals in. How is its Credit the result of saving? And is it consumed?

A great author writes a successful work. The copyright of it is Capital to him; or he may sell the copyright to a publisher, and it

becomes Capital to him. How is it the result of saving? And how is it consumed?

A person, by his skill and thought, discovers some valuable trade secret, which brings him great profits, and is Capital to him? How is it the result of saving? And how is it consumed?

The street crossings in London are valuable property, or estates, in land. They are bought and sold; they are bequeathed; they form the subject of marriage portions. They are Capital to their owners. How are they the result of saving? How are they consumed?

The proprietor of land discovers a valuable mineral spring on his land. This spring is found to be beneficial in many diseases. People crowd to it; a great demand for houses springs up; the spring and the land produce a great revenue to their proprietor. They are Capital to him. How are they the result of saving? The spring flows on for ever. How is it consumed?

A Dock, a Canal, or a Railway Company collect subscriptions from their shareholders. This is their Capital. They then expend that capital in excavating the dock, or the canal, or in building the railway. The dock, the canal, or the railway then become Capital to the company, and no doubt require a certain sum to be expended to maintain them in repair. But how are they consumed?

We might give several more instances, if necessary, to show that it is wholly erroneous to say that it is a fundamental proposition respecting Capital, that all capital is consumed.

4. We now come to Mill's fourth proposition respecting Capital, which was originated by Ricardo, and has been adopted by his idolaters, McCulloch and Mill. The proposition is this—"What supports and employs productive labour is the capital expended in setting it to work, and not the demand of purchasers for the produce of labour when completed. Demand for commodities is not demand for labour."

Now, upon looking at these words, they may be said to be a simple truism. Of course, if we buy a commodity in a shop, we demand the commodity, we do not demand or employ the labour. But of what practical consequence this can be, it would be difficult to conceive. Mr. Longe says it is like saying that a demand for beef is not a demand for oxen. When a purchaser buys something in a shop, of course he does not employ the labour himself directly; but he puts into the shopkeeper's hands the price of it, which replaces the sum which the shopkeeper spent in obtaining the article purchased, and which the shopkeeper may employ as wages

in paying the workmen to produce a similar article to replace the one that is sold, and so on in succession. Every succeeding purchaser puts the price of every successive product sold into the shopkeeper's hands, to be employed in buying labour, as long as the demand for the article continues. Thus, though the purchaser does not pay the workman directly himself, he supplies the funds to the shopkeeper, which he employs as wages. This is eminently a case where the aphorism *qui facit per alium facit per se* applies. And what practical consequence to the labouring classes it can be, whether the purchaser employs them directly himself, by paying them to produce the article, or paying them through the medium of the shopkeeper, it would be impossible to discover.

Nevertheless, as Mill and his followers attribute extraordinary importance to this doctrine, we shall lay before our readers what he says, and leave them to judge for themselves.

Mill says (*Principles of Political Economy*, book i. ch. 5, s. 9.)—"The demand for commodities determines in what particular branch of production the labour and capital shall be employed: it determines the *direction* of the labour: but not the more or less of the labour itself, or of the maintenance or payment of the labour. These depend on the amount of the capital, or other funds [what other funds?] directly devoted to the sustenance and remuneration of labour.

"Suppose, for instance, that there is a demand for velvet: a fund ready to be laid out in buying velvet, but no capital to establish the manufacture. It is of no consequence how great the demand may be, unless capital be attracted into the occupation, there will be no velvet made, and consequently none bought; unless, indeed, the desire of the intending purchaser for it is so strong, that he employs part of the price he would have paid for it in making advances to workpeople, that they may employ themselves in making velvet; that is, unless he converts part of his income into capital, and invests that capital in the manufacture."

We may observe that in such a case he would not convert his income into capital, unless he intended to sell the velvet with a profit. If he intended to use the velvet himself, what he paid would be income, just as if he had bought the velvet ready made from the shopkeeper. If a purchaser buys goods from a shopkeeper, the shopkeeper converts the money into capital by buying a fresh stock of goods to sell with a profit.

Mill proceeds—"Let us now reverse the hypothesis, and suppose that there is plenty of capital ready for making velvet, but no

demand. Velvet will not be made; but there is no particular preference on the part of capital for making velvet. Manufacturers and labourers do not produce for the pleasure of their customers, but for the supply of their own wants, and having still the capital and the labour, which are the essentials of production, they can either produce something else which is in demand, or, if there be no other demand, they themselves have one, and can produce the things which they want for their own consumption. So that the employment afforded to labour does not depend on the purchasers, but upon the Capital. I am, of course, not taking into consideration the effects of a sudden change. If the demand ceases unexpectedly, after the commodity to supply it is already produced, this introduces a different element into the question; the capital has actually been consumed in producing something which nobody wants or uses, and it has therefore perished, and the employment which it gave to labour is at an end, not because there is no longer a demand, but because there is no longer a capital."

Now, in the last passage, what does "Capital" mean? Is it the wages paid to the workman, or is it the product, for which there is no demand? If the wages be the capital, they do exist; they exist in the hands of the person to whom they were paid; and these persons may use them as Capital or Income as they please. If the product be the capital, it of course ceases to be capital when no one will buy it. But of what consequence is that to the labourers? Mill himself says, that a demand for products is not a demand for labour; therefore, according to his own doctrine, whether there be a demand for the product or not, it can in no way affect the labourers. If the workmen are paid for their labour what does it matter to them what becomes of their produce? The fund which paid them is not destroyed! it remains in existence to effect endless exchanges in succession. How this case helps on Mill's argument it is impossible to conceive.

He then proceeds.—This case, therefore, does not test the principle. The proper test is to suppose that the change is gradual and foreseen, and is attended with no waste of capital, the manufacture being discontinued by merely not replacing the machinery as it wears out, and not reinvesting the money as it comes in from the sale of the produce. The capital is thus ready for a new employment, in which it will maintain as much labour as before.

"This theorem that to purchase produce is not to employ labour; that the demand for labour is constituted by the wages which precede the production, and not by the demand which may exist for the

commodities resulting from the production, is a proposition which greatly needs all the illustration it can receive. It is to common apprehension a paradox, and even among political economists of reputation I can hardly point to any, except Mr. Ricardo and M. Say, who have kept it constantly and steadily in view. Almost all others occasionally express themselves as if a person who buys commodities, the produce of labour, was an employer of labour, and created a demand for it as really, and in the same sense, as if he bought the labour itself directly, by the payment of wages. It is no wonder that political economy advances slowly, when such a question as this remains open at its very threshold."

We think, but we are by no means sure, that we have seen some glimmer of Mill's meaning in the preceding paragraphs. He says that if there be a fund ready to buy velvet, but no capital to establish a manufacture, no velvet can be bought, because there is none made. We will now take a familiar instance, which just meets the case. Scotland, before the introduction of Banks and Credit, had abundance of fertile land and of unemployed people, but no capital to serve as wages to pay them to till and sow the land. Now, of course, there was always a demand for corn; but the Scottish proprietors could grow no corn, because they had no capital to pay as wages, before the corn was produced; and they could get no capital, because they had no corn to sell. They were, therefore, in a deadlock. If they could once get a crop sown, that crop would produce the capital to continue the cropping for ever. The real difficulty was to start the operation, which, as Mill truly says, could not be set agoing without capital spent as wages previous to obtaining the produce. *Ce n'est que le premier pas qui coute.* In fact, the corn was waiting for the wages, and the wages were waiting for the corn. It was an Economic position just like that of the two heroes:—

"The Earl of Chatham, with his sabre drawn,
Was waiting for Sir Richard Strachan;
Sir Richard, eager to be at 'em,
Was waiting for the Earl of Chatham."

No doubt there is the difficulty, as Mill says, just as in the case of the velvet. Now this difficulty is obviated, and the hiatus bridged over by means of Bank Notes. The Scottish banks, seeing the state of matters, established branches throughout the country, and advanced the **Present Value** of the future crops, in the form of their own Notes or **Credit**; and, by this means, the grand result was, obtaining the wages to start the operation. By this creation of

Credit, used as wages, the land is reclaimed, the seed is sown, and the sale of the crops provides the funds, partly to redeem the advances, and partly to renew the operations, which, being once started, may be carried on for ever. Hence the whole difficulty vanishes into air, and, virtually speaking, the person who buys the produce is the employer of labour, and creates the demand, in all respects, as effectually as if he himself had bought the labour directly, by the payment of wages.

Having thus shown how this imaginary difficulty is obviated, we now come to more tangible doctrine—"I apprehend that, if by demand for labour be meant *the demand by which wages are raised, or the number of labourers in employment increased, demand for commodities does not constitute demand for labour.*"

Such an assertion is so contrary to the plainest experience, that it is amazing that Mill could have made it; and, as is most usually the case, we have only to cite Mill to confute Mill. Elsewhere he says—(Book ii. ch. 2, § 5)—"It is a common saying that wages are high when trade is good. The demand for labour in any particular employment is more pressing, *and higher wages are paid, when there is a brisk demand for the commodities produced*; and the contrary when there is what is called a stagnation; then workpeople are dismissed, and those who are retained must submit to a reduction of wages, though, in these cases, there is neither more nor less capital than before.

"A manufacturer finding a slack demand for his commodity, forbears to employ labourers to increase a stock which he finds it difficult to dispose of; or if he goes on until all his capital is locked up in unsold goods, then, at least, he must of necessity pause until he can get paid for some of them. But no one expects either of these states to be permanent; if he did, he would, at the first opportunity, remove his capital to some other occupation, in which it would still continue to employ labour. The capital remains unemployed for a time, during which the labour market is overstocked, and wages fall. Afterwards the demand revives, and perhaps becomes unusually brisk, enabling the manufacturer to sell his commodity even faster than he can produce it; his whole capital is then brought into complete efficiency, and, if he is able, he borrows capital in addition, which would otherwise have gone into some other employment. At such time wages in his occupation rise. If we suppose, what in strictness is not absolutely impossible, that one of these fits of briskness or stagnation should affect all occupations at the same time, wages might undergo a rise or a fall."

Now what can be more contradictory to the doctrine, that "demand for commodities is not a demand for wages," than these two last passages? What need have we to refute Mill when he has done so effectually himself?

This doctrine of Mill's is so contrary to common sense, that it would seem waste of time to refute it. But if it wanted refutation, what more excellent example of it can be had than the evidence and report of the Committee, appointed on the sudden rise in the price of coal, in 1873. It was then distinctly proved that the price of iron rose immensely from the enormous demand for it; the immense demand for iron caused an immense demand for coal, and accordingly its price rose immensely, and its increased price caused an immense demand for labourers, and their wages, too, rose very greatly, though not in proportion to the rise of coal. Who, after this, can say that a demand for commodities is not a demand for labour? Who can say that an increased demand for the commodity, does not lead to a rise of wages? We have already shown that it is now well understood by the workmen, that the "wages fund" is not existing capital, but the price of the commodity produced; and their wages must rise and fall according to that price.

Mill's doctrine is founded on the exploded fallacy of Ricardo, that it is "Cost of Production" or "quantity of labour" which regulates value; without disputing that in some cases cost of production or quantity of labour affects the supply, and so influences price, it is just as often the reverse; and it is the increased price of the product which provides an increased fund to be divided between masters and workmen; and of this, the report of the Coal Committee is a pregnant and decisive instance.

We have thus shown that Mill's fourth fundamental proposition regarding Capital, is as baseless and untrue as the preceding three; and therefore it is wholly unnecessary to consider any more illustrations he may give. But there is one doctrine of his so extraordinary that we cannot pass it over:—

"The consumer has been accustomed to buy velvet, but resolves to discontinue that expense, and to employ the same annual sum in hiring bricklayers. If the common opinion be correct, this change in the mode of his expenditure gives no additional employment to labour, but only transfers employment from velvet makers to bricklayers. On closer inspection, however, it will be seen that there is an *increase* of the total sum applied to the remuneration of labour. The velvet manufacturer, supposing him aware of the diminished demand for his commodity, diminishes the production and sets at

liberty a corresponding portion of the capital employed in the manufacture. This capital thus withdrawn from the maintenance of velvet makers, is not the same fund with that which the customer employs in maintaining bricklayers ; it is a second fund. *There are, therefore, two funds to be employed in the maintenance and remuneration of labour, where before there was only one.* There is not a transfer of employment from velvet makers to bricklayers ; there is a new employment created for bricklayers, and a transfer of employment from velvet makers to some other labourers, most probably those who produce the food and other things which the bricklayers consume."

We pause for our readers to examine this astounding doctrine. According to Mill, if all the buyers of commodities were suddenly to discontinue buying them and employ those very funds, which were previously employed in buying commodities, in hiring labour, it would double the labour fund ! Is it necessary to point out the obvious arithmetical blunder on which it rests ? By Mill's own supposition the velvet makers are left unemployed. The labourers who are called upon to provide the food and necessaries for the bricklayers, previously provided that food for the velvet makers. Of course, if the velvet makers are left without wages they must starve, and cannot buy food ; but the bricklayers can, because the fund which formerly bought the velvet makers' food is now given to the bricklayers, and buys their food. To the producers of food, it makes no difference whether they sell it to bricklayers or to velvet makers. But by Mill's argument, he has simply taken away the funds from the velvet makers whom he has left to starve, and given them to the bricklayers, and by so doing he says that the labour fund is doubled ! It is plain that so far as regards the food producers, it is only substituting bricklayers for velvet makers, and there is, therefore, no increased demand for food. Thus, according to Mill, to take away a fund from one set of persons and to give the very same fund to another, is to *double* the fund ! Most wonderful logic ! This is truly the discovery of the Philosophers' Stone !

We have now found the grand secret to multiply a fund any number of times. According to this doctrine, robbing Peter to pay Paul doubles the fund. If taking away the fund from velvet makers and giving it to bricklayers *doubles* the fund, then taking it away from bricklayers and giving it to carpenters *triples* it ; taking it away from the carpenters and giving it to ploughmen *quadruples* it, and so on to any extent. Why should there ever be any want of funds to employ labour when they can be found so easily, simply by taking them away from some one else ?

Experience suggests to us a case where the application of this doctrine is highly satisfactory. When *Paterfamilias* has a lot of boys clamouring for pocket money—though what boys can want with pocket money we cannot conceive—he has only to take half-a-crown out of his pocket and give it to Roderick : Roderick is paid. *Paterfamilias* then takes away the half-crown from Roderick and gives it to Crichton : Crichton is paid. *Paterfamilias* then takes away the half-crown from Crichton and gives it to Keith : Keith is paid. *Paterfamilias* then takes away the half-crown from Keith, and puts it back in his own pocket. By this means each of the boys has been paid his pocket money, and *Paterfamilias* has got it in his own pocket as well. It is possible that Roderick, Crichton, and Keith may not fully comprehend the nature of this operation : at all events, *Paterfamilias* is quite satisfied with it. If the boys feel any difficulty about it, if they have an imaginary vacancy in their pockets, where the half-crown is not, *Paterfamilias* simply refers them to Mill, the logical Pope of the British people, who will explain to them quite satisfactorily that by this operation the fund has been *quadrupled*, and that they have each had their pocket money, and leaves them to digest this elementary lesson in Logic and Economics as best they may. And this is a principle of very extensive application : which shows that Economics is well worth the study of all *Patrum-familiarum*.

We may therefore dismiss Mill's fourth fundamental proposition regarding Capital to the same limbo as the other three. And we cannot help observing that this is a striking example of the folly of literary men, writing on subjects of which they have no knowledge. Here is a whole chapter of Mill, containing thirty pages, which is a complete mass of errors in itself, and on each separate part of it we have shown that Mill has contradicted himself. And thus the young student's mind is filled with erroneous notions on the fundamental principles of the subject, which he must utterly exterminate if he would understand modern commerce.

CASH CREDITS.

We have now to describe a species of Credit, devised by a Bank in Scotland, to which the marvellous progress of that country is chiefly due.

The Bank of Scotland was founded in 1695, with unlimited powers of issue both in amount and denomination. At first it only

issued Notes of £100, £50, £10, and £5. Though several times urged to issue £1 Notes, they did not do so until 1704. The Bank received a monopoly of banking for twenty-one years; but in 1716, when the monopoly expired, it was not renewed.

In the year 1727, the proprietors of the Equivalent Fund were endowed, by Royal Charter, with powers of Banking, and they assumed the name of the Royal Bank.

In the very contracted sphere of commerce in Scotland at that time, there were not sufficient Commercial Bills in circulation to exhaust the Credit of the Banks. They had, as it were, a superfluity of unexhausted Credit on hand; and the Royal Bank devised a new scheme for getting its Credit into circulation, which was the most marvellous development of Credit ever imagined.

It agreed, on receiving sufficient guarantees, to open credits of certain limited amounts, in favor of trustworthy and respectable persons.

A Cash Credit is a Drawing Account, created in favour of a person who pays in no money, which he may operate upon precisely in the same manner as on an ordinary account; the only difference being that instead of receiving interest on the daily balance of his account, as used formerly to be the case in Scotland, he is charged interest on the daily balance at his Debit. A Cash Credit is, therefore, an **Inverse** drawing account.

Cash Credits are applicable to a totally different class of transactions to those giving rise to Bills of Exchange. One difference being that Bills of Exchange arise out of the transfers of commodities, and are payable in one sum at a fixed date. Whereas Cash Credits are not issued on the transfer of commodities; or on any previous transactions. They are expressly intended to promote the formation of future products. They are not repayable at any fixed date; but they are a continuous working account, which remains open as long as the operations are satisfactory.

It is a condition of all Cash Credits that the persons to whom they are granted should accept all advances in the Bank's own Notes.

In order to understand clearly the principles of the system, it is only necessary to recur to our fundamental Definition or Concept of Credit. Because a true fundamental Definition or Concept is the polestar to guide us through all difficulties and perplexities. "There is nothing in the world," said the great Duke of Wellington, with his commanding good sense, "like a good Definition."

It has been shown that the true definition of **Credit** is the

“Present Right or the Present Value of a Future Profit.”

And every Future Profit, from whatever source arising, or of whatsoever nature, has a **Present Value**, which may be recorded on any material such as paper, and may be brought into commerce; and may be bought and sold, and transferred by manual delivery, exactly like money, or any other material chattel.

Land is an Economic Quantity, which produces a continuous series of profits; and a trader, exercising any profitable business, is an Economic Quantity, analogous to land, and produces a continuous series of profits.

The true limits of Mercantile Credit are the future profits of Mercantile traders. All Credit is sound which is redeemed at maturity; and Mercantile Banking consists in buying up the Rights to be paid out of these future profits of mercantile traders.

Now if every future mercantile profit has a Present Value, which can be brought into commerce and exchanged, the same is equally true of the Land, and of every commercial work or enterprise. The Present Value of every future profit from Land or any commercial work can be brought into commerce, and bought and sold, exactly like the Present Values of the Future Profits of traders, and if the Credit be strictly limited, and redeemed by the future profits of the land or commercial enterprise, Credit may be created to purchase the Present Value of these Future Profits from Land and commercial public works, exactly in the same way as it is created to purchase the Present Values of the Future Profits from traders.

Cash Credits are applied to two different purposes—

1. To aid private persons in business.
2. To promote Agriculture, and the formation of Commercial works of all kinds.

Cash Credits granted in aid of Persons.

Every man in business, however humble or however extensive, must necessarily keep a certain portion of ready money by him to answer immediate demands for small daily expenses, wages, and other things. This could, of course, be much more profitably employed in his business, where it might produce a profit of fifteen or twenty per cent. instead of lying idle. But unless the trader knew that he could command it at a moment's notice, he would always be obliged to keep a certain amount of ready money in his till, unless he were able to command the use of some one else's till.

Now one object of a Cash Credit is to supply this convenience to the trader, and to enable him to invest the whole of his capital in his business, and, upon proper security being given, to furnish him with the accommodation of a till at a moment's notice, in such small sums as he may require, on his paying a moderate interest for the accommodation.

Almost every trader in Scotland has a Cash Credit at a Bank, by which he can draw out such sums as he may want for his daily business, and replace such as he does not want before the close of bank hours.

Almost every young man in Scotland commencing business, does it by means of a Cash Credit. Thus, for instance, lawyers, or writers to the signet, commencing business, have occasion for ready money from day to day, before they can get in payments from their clients. It is a great bar to any young man to commence the business of a solicitor without capital, which must either be his own, or furnished him by his friends. It is an immense advantage to him and to them, to have it supplied by a Bank, by means of a Cash Credit, on a mere guarantee, a mere contingency which they would never give if they thought there was any danger of its being enforced.

So the great employers of labour, manufacturers, builders, ship builders, and others, have Cash Credits, by which they can pay their labourers.

These Credits are granted to all classes of society, to the poor as freely as to the rich. Everything depends upon **Character**. Young men in the humblest walks of life may inspire their friends with confidence in their steadiness and judgment, and they become sureties for them on a Cash Credit. This is in all respects of equal value as money, and thus they have the means placed within their reach of rising to any extent that their abilities and industry permit them. Multitudes of men who have raised themselves to immense wealth began life with nothing but a Cash Credit. As one example among thousands, Mr. Monteith, M.P., told the Committee of the House of Commons in 1826, that he was a manufacturer, employing at that time 4,000 hands, and that, except with the merest trifle of capital lent him, and which he soon paid off, he began the world with nothing but a Cash Credit.

The Banks usually limit their advances to a certain moderate amount, varying from £100 to £1,000 in general, and they take several sureties in every case. These cautioners, as they are termed in Scottish Law, keep a watchful eye on the proceedings of the

customer, and have the right of inspecting his account with the Bank, and of stopping it at any time, if irregular. These Credits are not meant to degenerate into dead loans, but they are required to be operated upon by constantly paying in and drawing out.

The enormous amount of transactions carried on by this kind of account may be judged of by the evidence given before the Committee of the Commons in 1826. It was then stated that on a Credit of £1000, operations to the extent of £50,000 took place in a single week. Others stated that on a Cash Credit of £500, operations to the amount of £70,000 took place in a year. One witness stated that in a very moderately-sized country-bank, operations to the amount of £90,000,000 took place in twenty-one years; and that the whole loss to the bank during that period was £1200.

At that time (1826) it was conjectured that there were about 12,000 Cash Credits guaranteed by about 40,000 sureties, who were interested in the integrity, prudence, and success of the customers. The witnesses before the Lords declared that the effects of these were most remarkable on the morals of the people.

On Cash Credits granted to promote Agriculture and the Formation of Public Works.

We have now to show how the Scottish System of Cash Credits has been applied to promote Agriculture, and the formation of all manner of Public Works.

The two Scottish Banks which were first founded applied their Cash Credits to assist the industry of traders, and tendered much to forward it. Agricultural industry had not then awoken. The Scots were a fierce, turbulent people, who thought more of harrying their neighbours, and raiding their cattle, than of peaceful agriculture. The land was bound down under the fetters of the feudal system. But after the suppression of the Rebellion in 1746, the feudal system was, to a great extent, broken up, and a great spirit of enterprise awoke, and, then, for the first time, Scotland became an industrial nation.

At this time there were, in many parts of Scotland, large tracts of reclaimable land, and multitudes of people, but they remained unemployed, because there was no money in the country to set their industry in motion.

Now, suppose that a proprietor of one of these tracts of land had had £10,000 in money: and that he had employed it in paying wages to labourers, and in buying seed to sow: then, in

course of time, the value of the produce of the land would replace the sum expended in bringing the land into cultivation. Then the money so employed would have been expended as **Capital**.

But, at that time, there was, comparatively speaking, no money in the country. It was just then emerging from the bonds of feudalism. The chiefs had vast tracts of land, and, no doubt, lived in a state of rude abundance from their herds and flocks, and the natural produce of the soil. But commerce had never penetrated into these highland strongholds: and consequently the greatest chiefs were very seldom blessed with the sight of coin. But at this period began the transition from feudalism into industrialism, in which money was absolutely indispensable. It was at this time that the Banks, having habituated the people during forty years to receive their £1 Notes in all respects as Money, and having acquired their thorough confidence, threw out branches in all directions, and sent down boxes of £1 Notes.

Farmers, at that time, had no votes in Scotland, and consequently the landlords had no motives to keep their tenants in political thralldom, as was too much the case in England. They adopted every means possible to develop the resources of the soil. And, as it was not to be expected that the farmers would lay out their capital and industry on the soil without security of tenure, it became the custom, almost universal in Scotland, for landowners to grant their tenants leases of nineteen years; and, in many cases, for particular reasons, much longer than that.

Upon the security of these leases, and also upon that of personal friends, the Banks everywhere granted Cash Credits to the farmers, the advances being made exclusively in their own £1 Notes. From the strong constitution of the Banks, and the universal confidence they had acquired, their Notes were universally received as Cash, and, though they were demandable in cash at the Head Office, no one ever dreamt of demanding payment for them.

With these advances in £1 Notes, the farmers employed the labourers in reclaiming the land, bought seed, and sowed the crops. The Notes were employed in exactly the same way as Money would have been, and they produced exactly the same effects as money would have done.

The land was reclaimed, and sown, and stocked, and, in a few years, bleak and barren moors were everywhere changed into fields of waving corn: and they produced continuous series of profits. With the value of the produce the farmers gradually repaid the loans, and reaped a profit.

Now, if it be admitted that Money expended in agricultural improvements is used as **Productive Capital**, how can it be denied that Credit, employed in exactly the same way, and which produces exactly the same effects as Money, and produces exactly the same profits, is also equally **Productive Capital**?

The £1 Notes were universally received by the people as of exactly the same value as Money: and, therefore, they were, in all respects, Money; they produced exactly the same profits that Money would have done. Now, as we have seen that "**Capital is Anything which produces a Profit**," it is evident that the £1 Notes were just as much **Productive Capital** as the Money.

The only difference was that, in using Money, the employer made **Capital** of the **Realised** Profits of the **Past**: in using Credit he made **Capital** of the **Expected** Profits of the **Future**. But the results are exactly the same in either case.

Everyone acquainted with Scotland, knows perfectly well that the prodigious progress in agriculture made in that country during the last 150 years has been almost entirely effected by means of these Cash Credits.

Not only has almost the entire progress in agriculture between been effected by these Cash Credits, but all public works of every description — Roads, Canals, Docks, Harbours, Railways, Public Buildings, &c. have also been made by means of Cash Credits.

It was stated to the Committee of the House of Commons, in 1826, that the Forth and Clyde Canal was executed by means of a Cash Credit of £40,000, granted by the Royal Bank. So, when a Road has to be made, the Trustees obtain a Cash Credit, and pay it off out of the rates. So, when a Railway, a Dock, a Harbour, a Public Building, a Canal, is to be made, the Directors obtain a Cash Credit, and so pay the wages of the men. We have given elsewhere (**Credit**) the instance of the Market at Guernsey being built by Notes issued by the States, secured on the future profits of the Market. Many other Markets have been built by the same means. The great Cash Credit system of the Scottish Banks is absolutely the same thing, only on a prodigiously enlarged scale, and a more organised system.

It is thus seen how Credit is applied to the **Formation** of **New Products**, equally well as to the **Transfer** of existing ones. Credit is Purchasing Power equally as Money, and it may be applied to purchase **Labour** to form **New** products, equally well as to transfer existing ones. The principle of the Limit, however,

being exactly the same in both cases — namely, that it is the **Present Value** of the **Future Profit**.

When Money is used to Produce a Profit, it is expected that the Profit will replace the Money advanced; when Credit is used to produce a Profit, it is expected that the Profit will redeem the Debt incurred.

Hence Credit can do whatever Money can do; but we have shown that Credit is the reverse of Money. Hence, in Mathematical language, all the propositions which are true with respect to Money, are equally true with respect to Credit, only with the sign changed.

Exactly the same effects were produced in England by the use of Banker's Notes. The success of the Bridgewater Canal had exactly the same effects as the success of the Liverpool and Manchester Railway, eighty years afterwards. The period from 1776 to 1796 was just as great an era in canal-making, as the subsequent period in railway-building, considering the wealth of the country at the respective times. In the course of twenty years, England, from being the most backward country in Europe in water communication, was covered with a network of canals such as no other country but Holland can boast. Burke says that when he first came to London there were not twelve bankers out of London. In 1793 there were 400. However, these bankers, not having the solid constitution of the Scottish Banks, were swept away in multitudes in the panics of 1793 and 1797. But, nevertheless, though the bankers were swept away, the solid results of their issues of Notes remained.

Thus, it is now clearly demonstrated that **Credit** may be used as **Productive Capital**, exactly in the same way, and in the same sense, and for all the purposes that Money is.

Remarks on the Scottish System of Cash Credits.

All these marvellous results, which have raised Scotland from the lowest depth of barbarism up to her present proud position, in the space of 200 years, are the children of pure Credit. It is no exaggeration, but a melancholy truth, that, at the period of the Revolution, in 1688, and the foundation of the Bank of Scotland, in 1695, partly owing to such a series of disasters, as cannot be paralleled in the history of any other independent nation: partly owing to its position on the very outskirts of civilisation, and far-removed from the humanising influence of

commerce : divided into two nations, aliens in blood and language : Scotland was the most utterly barbarous and lawless country in Europe. And it is equally undeniable that the two great causes of her rapid rise in civilisation and wealth have been her systems of **National Education** and **Banking**.

Her system of Banking has been of infinitely greater service to her than mines of gold and silver. Mines of the precious metals would probably only have demoralised her people, and made them more savage than they were before. But her Banking system has tended immensely to call forth every manly virtue. It has taught them industry, steadiness, and moral rectitude. In the **Character** of her own people Scotland has found **Wealth** infinitely more beneficial to her than all the mines of Mexico and Peru.

The express function of the Banks is to create Credits, Incorporeal entities, created out of Nothing, for a transitory existence ; and when they have performed their functions, vanishing again into the **Nothing** from whence they came. And has not this **Credit** been **Capital**? Will any one, with these results staring him in the face, believe that there are some persons who are supposed to be Economists who maintain that the results of Credit are purely imaginary? That Credit conduces nothing to Production and the increase of Wealth? That Credit only transfers existing Capital? But even if it did no more than that, it has been shewn that **Circulation** or **Transfer** is one species of Production ; as is, indeed, now admitted by all Economists of note. And that those persons who say that Credit is Capital are such puzzle-headed dolts as to maintain that the same thing can be in two places at once !

Circulating Credits of all kinds have exactly the same effects as Money, both in circulating commodities, and in promoting the formation of new products. And they may be used as Productive Capital exactly in the same way, and in the same sense, as Money is.

It must be observed that all these Cash Credits are for a distinct purpose, quite different from the discount of Mercantile Paper. The marvellous results they have produced are due to a system of pure **Accommodation Paper**. They are not founded on any previous transactions ; nor are they for the purpose of transferring existing products. They are created for the express purpose of bringing **New** products into existence, which, but for them, would either have had no existence at all ; or, at all events, would have been deferred for a very long period, until solid Money could

have been accumulated to effect them. They are founded on exactly the same principles as the discount of Mercantile Bills. In discounting Mercantile Bills, the banker merely buys up the Right to a future payment, to be made out of the profits of the transaction. In creating Cash Credits, the banker merely buys up the Right to a future payment, to be made out of the future profits of the land, or other public works.

The invention of Cash Credits has advanced the wealth of Scotland by centuries. We have an enormous mass of Exchangeable Property created out of **Nothing** by the mere will of the Bank and its customers, which produces all the effects of solid Gold and Silver; and when it has done its work, it vanishes again into **Nothing**, at the will of the same persons who called it into existence. Hence, we see that the mere will of man has created vast masses of **Wealth** out of **Nothing**; and, then having served their purpose, they are **Decreated** into the **Nothing** from whence they came; which are

“Melted into air, into thin air.”

But their solid results have by no means failed—

“Like the baseless fabric of a vision, leaving not a wreck behind.”

On the contrary, their solid results have been vast tracts of barren moor converted into smiling fields of waving corn; the manufactures of Glasgow, Dundee, and Paisley; the unrivalled steamships of the Clyde; great public works of all sorts—roads, canals, bridges, harbours, docks, railways, and many others; and poor young men raised up into princely merchants.

What the Nile is to Egypt, that has her Banking System been to Scotland; and it was fortunate for her that the foundations of her prosperity were laid broad and deep before the gigantic fallacy was dreamt of that the Issues of Banks should be inexorably restricted to the amount of gold they displace; that no increase of money can be of any use to a country; and before Mill had proclaimed to the world that to create Credit in excess of specie is Robbery!

The reader will now perceive the gigantic utility of the £1 Note system to Scotland; and comprehend the consternation and fury of the Scottish people, when various attempts have been made by Parliament to suppress them.

When Parliament suppressed £1 Notes in England, in consequence of the evils they were alleged to produce, owing to the bad organisation of the English Banking System, before the

monopoly of the Bank of England was first broken up in 1826, it was intended to have suppressed them also in Scotland. But all Scotland rose up against it; and, headed by Malachi Malagrowther, raised such a commotion that an inquiry was granted, which first made the Scottish system of Banking understood, and the attempt was abandoned. Still, however, constant jeers and gibes were addressed to the Scottish people, by persons who knew nothing about the subject, about their fatuous attachment to their dirty £1 Notes. But the Scottish people knew their value to the country far better than their assailants. The Scots knew that the prosperity of their country was bound up with the Cash Credits; and Cash Credits were bound up with the issue of £1 Notes. To have suppressed the Scotch £1 Notes at that time would have destroyed two-thirds of the business of the Banks. The extent of commerce in Scotland at that time was not sufficient to support the public Banks. It was stated that at that time two-thirds of the business of the Scottish Banks consisted in Cash Credits; though we are informed that now, in consequence of the great development of commerce, the ratio of Cash Credits to the mercantile business of the Banks has considerably diminished.

Happily, however, no such attempts will ever be made again, now that the subject is better understood. Parliament is, however, justified in taking any measures it may be deemed necessary to secure their perfect safety and convertibility. So completely has the tide of opinion changed, that the question is now whether £1 Notes can be introduced into England. But with the present transitional state of Banking in England, it is premature to discuss that question.

THE CHANNEL OF CIRCULATION.

The quantity of the Circulating Medium, or the amount of Money and Credit, representing the **Indebtedness**, or the balances which arise from the unequal changes of products and services (**Money**), is frequently termed by Adam Smith and other writers the **Channel of Circulation**.

The Channel of Circulation is filled with some **Material** (counting written and unwritten Credit as identical); and Prices are estimated by the Quantity of this Material, which is given in exchange for any Economic Quantities.

Let us suppose that gold alone was used at any time to represent

Debt, and fill the Channel of Circulation. This gold is divided into certain pieces of fixed weight and quality, termed Coins; and Prices are estimated in these Coins.

But suppose that at any time gold was discontinued, and Silver substituted as the representative of Debt; and suppose that Coins were struck of silver of exactly the same weight as the Gold ones.

Then, as Silver is, at the present moment, about thirty-five times less valuable than gold, it would require thirty-five times as many Silver coins to represent any amount of Debt, as it would Gold coins. And Prices would rise thirty-five fold; but other products would still preserve the same relations among themselves. Hence, though Prices would rise, yet the Values of products with respect to each other would remain the same.

Again, suppose that Silver was taken away as the representative of Debt, and Copper substituted; and Copper coins struck of the same weight as the previous Gold and Silver ones, and called by the same name. Then prices would be estimated in Copper coins; and as Copper is about 900 times less valuable than Gold, prices estimated in Copper would rise to about 900 times their amount in Gold. But the relative value of all other commodities would remain the same.

Now as the value of gold, as representing Debt, depends on the quantity of gold which represents any amount of Debt, it would manifestly follow that if the quantity of gold which represented any amount of Debt were greatly increased, the Value of Gold would greatly diminish. If Gold became as plentiful as Silver, Gold would have no more value than Silver. Consequently, even while the weight and quality of the Coins remained the same, Gold would fall to the thirty-fifth part of its former value as a Purchasing Power.

So if Gold became as plentiful as Copper, it would have no more Value, or Purchasing power, than Copper; that is, it would fall to about the 900th part of its former value.

Thus, in a general way, if any quantity of Stuff of any sort is used to represent any quantity of Debt at any time; and if the quantity of Stuff is greatly increased, while the quantity of Debt remains the same, it necessarily produces a great diminution in the Value of the Stuff, or a general rise of Prices.

But the quantity of Stuff which represents Debt, and fills the Channel of Circulation, need not be all of the same material. It may be partly Gold, partly Silver, and partly Copper; and Prices

will be estimated by the whole quantity of Stuff which fills the Channel of Circulation, and not any particular portion of it.

In modern times, a new kind of Stuff is employed to a gigantic extent, to fill the Channel of Circulation ; and that is **Credit** ; or, **Rights of Action** in various forms.

With respect to Credit, there is a most important observation to be made ; Credits in some countries are made payable in Gold, and, in some countries, in Silver.

Now, Credits payable in Gold—which we may term Gold Credits—are of exactly the same value as Gold ; and Credits payable in Silver—which we may term Silver Credits—are of exactly the same Value as Silver.

Hence the Value of Gold throughout the world is determined not only by the actual quantity of Gold ; but by the aggregate quantity of Gold, and all Gold Credits.

So the Value of Silver throughout the world is determined not only by the actual quantity of Silver ; but by the aggregate quantity of Silver, and all Silver Credits.

And, furthermore, the Value of Gold compared to Silver is determined not only by the relative quantities of Gold and Silver themselves ; but by the ratio of the aggregate of Gold, and all Gold Credits, compared to the aggregate of Silver, and all Silver Credits.

It is the enormous creation of Credit in modern times, in the form of Mercantile Credits and Banking Credits, which has so prodigiously raised the prices of commodities, and diminished the rate of interest in the two last centuries in this and in many countries.

It is shown that the quantity of Credit which is used, and in circulation, in this country, is at least one hundred times the amount of Metallic Coin.

Furthermore, there are in some countries, such as Russia, Argentina, and others, vast quantities of Inconvertible Paper Money ; this Paper Money is an Independent standard, just like Gold and Silver ; it is almost everywhere at a heavy discount as compared to Specie ; but it is nevertheless a standard at its Value in Specie.

And the total aggregate of all the Gold and Gold Credits—all the Silver and Silver Credits—all the Copper—all the Inconvertible Paper Money and Paper Money Credits—constitutes the Circulating Medium or Currency of the world in which prices are estimated.

Hence the thorough comprehension of the principles and

mechanism of the colossal system of Credit is the very foundation of modern Economics.

It is the quantity of Credit which in modern times has the greatest influence on Prices—far greater than the quantity of Gold and Silver; and variations in the quantity of Credit produce more changes in the value of commodities than any changes in the quantity of Gold and Silver; and it is the abuses of Credit which produce those terrible calamities known as Commercial Crises and Monetary Panics.

CHEQUE.

A Cheque is one form of Incorporeal Property; it is a *Jus in personam*.

When a customer pays in money to his account with his banker, or discounts a Bill of Exchange with him, the Money and the Bill of Exchange become the absolute property of the banker, to use in any way he pleases for his own purposes. In exchange for them he creates a Credit in his books, which in the technical language of banking is termed a Deposit. These Credits, or Deposits, are the price the banker pays for the Money or the Bill. That is, the banker issues a Right of Action against himself to his customer, by which he engages to pay the amount in money on demand to his customer, and at the same time authorizes him to transfer the Right of Action to anyone he pleases, and engages to pay the transferee the money on demand in the same way as he does to his own customer.

For the sake of convenience these Banking Credits, or Deposits, may be transferred by paper documents of two forms. 1. The banker may give his customer his own Promissory Note, engaging to pay to his customer, or order, or bearer, a certain sum of money on demand. These are termed Bankers' Notes. 2. He may authorize his customer to write him a Note, directing him to pay any other person, or order, or bearer, on demand a certain sum of money. These Notes were formerly called Cash Notes; in modern usage they are termed **Cheques**. These Bankers' Notes and Cheques may circulate in commerce like money, and effect any number of exchanges, until they are paid off and extinguished. Bankers' Notes and Cheques form an integral part of the Circulating Medium or Currency. They are termed in Law *Valuable Securities*.

CHOSE-IN-ACTION.

The blunder committed by Mill, Capps, and many others, in holding the Funds to be a Mortgage on the land and its products ; and that committed by Stanley Jevons, Roscher, and many others, in holding that Bills of Exchange are titles to property ; show such ignorance of the elementary principles of Jurisprudence and Mercantile Law, and is so important as regards Economics, that it will be of advantage to explain it fully for the benefit of lay readers, and to set before them the nature of a *Chose-in-action*.

Thus it is said (*Termes de la Ley, Chose-in-action*)—"Thing in action is when a man hath cause, or may bring an action for some duty due to him, as an action of debt upon an Obligation, Annuity, or Rent and because *they are things whereof a man is not possessed*, but for the recovery of them is driven to his action, they are called things in action."

So also (*Stephen's Blackstone*, part ii. ch. 1)—"We will proceed next to take a short view of the nature of property in *action*, which is where a man has not the enjoyment (either actual or constructive) of the thing in question, but merely a *right to receive it* by a suit or action at law ; from whence the thing so recoverable is called a thing (or chose) *in action*. Thus money due on a bond is a *chose-in-action*, for a Right to claim the money vests whenever it comes payable ; but there is *no possession* till recovered by course of law, unless payment be voluntarily made."

This is not quite correct. It is not the *money* due which is the *chose-in-action*, but the Right to recover it. A chose-in-action is simply a right-of-action, as appears more clearly in the next citation.

Thus it said (*Blount, Law Dict.*)—"Chose-in-action is a thing Incorporeal and only a **Right**, as an Annuity, Obligation for Debt Chose-in-action may also be called chose-in-suspense, because it has no real existence in being, nor can be properly said to be in our possession."

Jurists of all nations include Abstract Rights of sorts, and among them Rights of Action or Debts, as Wealth, Goods, Chattels Vendible Commodities, Merchandise.

Pothier carefully warned his readers against supposing that a Creditor has any Right or Property in the possessions of his Debtor.

Thus the Funds are *choses-in-action*, because the fundholders have a mere Right of Action against the State as a *Persona* to demand :

sum of money, but they have no right to any of the actual property of the State. So a Bill of Exchange or any Debt is a *chose-in-action*, as it is a mere Right of Action against the person of the debtor. In a *chose-in-action* there must be a positive Right to demand a specific sum of money or other thing from some certain person.

Thus Shares in Commercial Companies, Copyrights, Patents, &c., are not *choses-in-action*, because they are mere Rights to contingent and uncertain profits.

But Mortgage Deeds, Bills of Lading, Dock Warrants, Pawn-brokers' Tickets, are choses-in-possession, because they are titles to specific things.

CIRCULATING MEDIUM: CURRENCY.

We shall consider the terms **Circulating Medium** and **Currency**, which are both of modern origin, together. The meaning of these terms has, in recent times, given rise to many controversies; but they are always admitted to be synonymous, consequently, if we can positively determine the meaning of one of them, that will also necessarily determine the meaning of the other.

The term **Circulating Medium** does not occur in Adam Smith. It seems to have come into use in the last decade of the last century. The first occasion on which we have met with it is in the debate on the Bank Restriction Act of 1797. Mr. Fox said, "He wished that gentlemen, instead of amusing themselves with new terms of 'Circulating Medium' and the like, &c.," which shows that it must then have been of very recent origin.

Mr. Pitt, in his reply, said: "As so much has been said on the nature of a Circulating Medium, he thought it necessary to notice that he did not, for his own part, take it to be of that empirical kind which had been generally described. It appeared to him to consist of **Anything** that answered the great purposes of trade and commerce, whether in specie, paper, or any other terms that might be used." It is quite evident, therefore, that Mr. Pitt included under the term Circulating Medium or Currency, Money and Credit in all its forms, both written and unwritten. This continued to be the invariable usage in all Parliamentary debates until Lord Overstone and his sect perverted men's minds with a fantastic definition of his own, which he beguiled Sir Robert Peel into adopting.

To understand the meaning of Circulating Medium, Currency, Circulation, and Economics in general as a Science, we must revert

to the original concept of it by its founders, the Economists, as the Science of Exchanges or Commerce, which it was understood to be by everybody, until J. B. Say, followed by J. S. Mill, utterly ruined it as a Science, but to which all the most intelligent Economists in the world are now reverting, as the only one by which it can be created as a Science, but which is absolutely unintelligible on the system of J. B. Say and John Stuart Mill.

The Economists only admitted an Exchange to be where a material product was exchanged for a material product, *i.e.* a Barter; that is, where each side obtained a **Satisfaction**.

But in modern times such Exchanges are comparatively rare. Persons usually want to obtain things from others, while those others want nothing from them. To obviate the inconveniences which would arise if no one could get what he wanted, unless he could supply that other person with what he wanted in return at the same time, people hit upon the plan of adopting some commodity which should be universally exchangeable. The buyer therefore gave the seller in exchange for his product an **Equivalent** in this universally exchangeable merchandise, so that he could get any satisfaction he pleased from anyone who could render it.

This universally exchangeable merchandise is termed **Money**. The person who has got the Money has, no doubt, got the equivalent in value for the satisfaction he rendered to the other person; but he has not got a satisfaction himself; his desire is not consummated or completed. In order to obtain a satisfaction, he must exchange away the Money he has received for some product he does desire. Hence the Economists termed a Sale a **Demi-Exchange**.

Le Trosne says, "There is this difference between an Exchange and a Sale, that in an Exchange everything is consummated or completed (*consommé*) for each party. They possess the thing which they desired to procure, and they have only to enjoy it. In the Sale, on the contrary, it is only the purchaser who has attained his object, because it is only he who is in a position to enjoy. But everything is not ended for the seller."

And again, "Exchange arrives directly at its object, which is completion (*consommation*); it has only two terms, and is ended in one contract. But a contract in which Money intervenes is not completed (*consommé*), but it is necessary that the seller should become a buyer, either himself, or by the interposition of the person to whom he transfers the Money. There are therefore, to arrive at completion (*consommation*), which is the ultimate object, at

least four terms and three contractants, of whom one intervenes twice."

When, however, the person who had sold his product for Money, and therefore furnished a satisfaction to the other party, had himself exchanged away the Money and obtained a product for it, he too had acquired a satisfaction which he could enjoy, and the Exchange was completed (*consommé*).

For this reason Money was called the **Medium of Exchange**.

This Sale the Economists termed **Circulation**. Sale or Circulation the Economists defined to mean the Exchange of a product for Money. Circulation meant a Purchase with Money, in contradistinction to the exchange of products or barter.

Hence Money was also termed the **Circulating Medium**, or the Medium of Circulation.

Thus the Economists said that when a person had sold his product for Money, though he had obtained an equivalent in value, he had only acquired a **Right** to obtain a satisfaction, and thus that Money is only the highest and most general form of **Credit**.

The verb to Circulate, like many others in English, has both an active and a neuter meaning.

1. It means that which circulates commodities, *i.e.*, which causes commodities to circulate; where it is an active verb.

2. That which circulates itself; where it is a neuter verb.

Smith uses the word Circulate in both senses, in different passages. Thus, speaking of Gold and Silver, he says—"Their use consists in Circulating commodities.

"The great wheel of Circulation is altogether different from the goods circulated by it. The revenue of the society consists altogether in these goods, and not in the wheel that circulates them." In these two passages the verb Circulate is active.

A little further on he speaks of the different sorts of Paper Money. He says that the Circulating notes of banks and bankers are best known: where circulating is neuter.

In the following sentence both senses occur: "Let us suppose, for example, that the whole Circulating money of some particular country amounted at a particular time to one million sterling, that sum being sufficient for Circulating the whole annual products of their land and labour."

The ordinary meaning of words in scientific language, leaves no possible doubt as to which is the true meaning of circulate in the expression Circulating Medium. A medium, in scientific language, means some middle thing by which something else is effected. Thus

Money is termed the Medium of Exchange, because it is the Medium by which Exchanges are effected. Hence the Circulating Medium is the Medium by which the circulation of commodities is effected.

Now it has just been shown that by Circulation the Economists meant Sales. And how are Sales effected? By the means of Money and Credit in all its forms. Buying with Money effects the Circulation or Sale of commodities ; but buying with Credit equally effects the Sale or Circulation of commodities, in whatever form the Credit may be, either written or unwritten.

The importance of fixing the meaning of circulating consists in this, that an immense portion of Credit circulates commodities, and yet it does not circulate itself ; thus all the book debts of traders have purchased, or circulated, commodities, and are therefore a part of the Circulating Medium ; and yet they do not circulate themselves until they are put into the form of Bills of Exchange.

Hence Money and Credit are equally Circulating Medium, and the total of the Circulating Medium comprehends the total amount of Money and Credit in all its forms and varieties, both written and unwritten.

On the Meaning of Currency.

In all the Parliamentary discussions during the war and afterwards, the words Currency and Circulating Medium were always used as equivalent and synonymous. Thus we have seen that Mr. Pitt, in the debate of 1797, said that Circulating Medium comprehended Specie, Paper, and other forms of Credit, which could only mean book debts.

So in the great Currency debate in the House of Commons in 1822, Lord Titchfield said—"When it was considered to how great an extent these contrivances had been practised in the various modes of **Verbal, Book, and Circulating Credit**, it was easy to see that the country had received a great addition to its **Currency**. This addition to the Currency would have the same effect as if Gold had been increased from the mines."

The meaning of the term Circulating Medium is perfectly clear and simple, and free from the shadow of doubt. The meaning of the word Currency, which all writers admit to be synonymous with Circulating Medium, is, however, much more recondite, and has given rise to many protracted controversies in recent times, which we shall have to consider presently. We shall now merely explain the real meaning of the word.

The word **Currency** is a technical term in Mercantile and Constitutional Law, and the following is the true meaning of "**Current**" and "**Currency**" in English Law.

It is a general rule of law that a person cannot transmit to any one else any better title to a thing than he has himself.

As it is said—"Nemo plus juris ad alium transferre potest quam ipse haberet."

"No one can transmit to another a greater right than he has himself."

It is also a general rule of law that if a person loses a thing, or has it stolen from him, he does not thereby lose the property in it. Consequently he can not only receive it from the finder or thief himself, but also, if found in the possession of anyone else, to whom the finder or thief has disposed of it, even though that person bought it, or took it in pledge, honestly and in good faith, and gave full value for it, and not knowing that it was not the lawful property of the seller or pledger. This right of recovery is termed the *Jus vindicandi* in Roman Law.

But to this rule of law Money was always, from the very necessity of the case, an exception. Business and commerce could not go on if the seller of goods had always to inquire into the right of the purchaser to the money he possesses. If money has been lost or stolen, the true owner may recover it if he finds it in the possession of the finder or thief. But if the finder or thief has once purchased goods with it, and the shopkeeper has taken it honestly in the usual course of business, and without knowing it has been stolen, he can retain it against the true owner, even though he should be able to identify it. That is, the person who acquires Money honestly in the usual course of business has a good title to it, even though the transferor had not. Thus it is said in law that "*the property in Money passes by delivery.*" Thus, after Money has once been passed away in commerce to an innocent receiver, the true owner of it has lost his *Jus vindicandi*.

It is this peculiarity which affects the property in Money which passes by delivery, which is denoted by the words **Current** and **Currency** in English law. And when an Act of Parliament declares that any instrument shall be "**Current**," it means that the property in it shall pass by delivery to the innocent purchaser or pledgee.

This Quality of Currency is also called **Negotiability**.

And when the representatives of Money, such as Bank-notes, Bills of Exchange, &c., came into use, the Law Merchant applied

the same principle of Currency to them. They are like Money in so far as this, that the property in them passes by delivery. Thus if they are lost or stolen, the true owner may recover them if they are still in the hands of the finder or thief; but if the finder or thief succeeds in passing them away, or pledging them for value in the ordinary course of business to an innocent purchaser, that innocent purchaser acquires the property in them, and may retain them against the true owner, who has lost his *Jus vindicandi* equally as in the case of Money, and enforce payment of them from all the parties liable on them.

This doctrine has been affirmed in a whole series of cases in the Courts of Law, which we shall notice shortly.

It follows from this that in strict law this principle of Currency can only be applied to those Rights of Action which are recorded on some material, such as paper. An abstract Right cannot be lost, mislaid, or stolen, or passed away in commerce by hand. For a Right of Action to be Currency in strict law, it must be recorded on some material, so as to be capable of being carried in the hand or in the pocket, or put away in a drawer, or dropped in the street, or stolen from the drawer or the pocket, or picked up in the street and carried away by the finder or thief, and transferred by hand in commerce.

So far as regards Mercantile Law, then, there is no difficulty; the meaning of the word is perfectly clear. But if the word Currency is used to denote a certain class of Economic Quantities, synonymous with Circulating Medium, a difficulty arises; because there is an immense mass of Credit which has produced exchanges and has circulated commodities, and is therefore Circulating Medium, which is not recorded on any material at all in such a way that it can be lost or stolen, and carried off and transferred in commerce by manual delivery.

Thus the gigantic mass of Banking Credits, and the Book Debts of traders, have all effected Sales or Circulation, and therefore they are all Circulating Medium; but they have not the attribute of Currency in a legal sense, because they cannot be mislaid, lost, or stolen; and picked up or stolen from the pocket, or the drawer, and passed away in commerce by manual delivery. So also private Debts between persons, termed Verbal Credits; they only arise from the transfer of goods or money, or from some service performed; and they exist equally whether they are recorded on paper or not. They are equally Circulating Medium. Private Debts amongst traders effect sales and affect prices exactly like so much

money. Consequently, though they are not Currency in strict law, yet if that word is still to be retained as a scientific term, denoting a certain class of Economic Quantities, synonymous with Circulating Medium, they must all be included in that term, as was always done in the Parliamentary debates; because they can always be recorded on paper at pleasure, and put into circulation; and then they actually do become Currency in strict law, and their nature and effects are exactly the same, whether they are recorded on paper or not.

Decisions in the Courts of Law respecting the meaning of Currency.

The meaning of the word Currency has acquired so much importance, in consequence of the Bank Charter Act of 1844 being based upon a peculiar definition of it, which will have to be examined hereafter, that it will be more satisfactory to place before readers a *résumé* of the decisions of the Courts of Law as to the meaning of the term.

Bank Notes.—In *Miller v. Race* (1 Bun. 452), confirming *Anonymous* (1 Lord Raymond, 738), the Court of King's Bench decided that Bank Notes have the Credit and Currency of Money, to all intents and purposes. "An action would lie against the finder—that no one disputes; but not after the note had been passed away in **Currency**. An action would not lie against the defendant, because he took it in the course of **Currency**; and it therefore could not be followed in his hands. It never shall be followed into the hands of a person who *bonâ-fide* took it in the course of Currency. A Bank Note is constantly and universally, both at home and abroad, treated as Money, as cash; and it is necessary for the purposes of commerce that their **Currency** should be established and maintained."

Cheques.—In *Grant v. Vaughan* (3 Barr. 1516) the Court unanimously held that Cheques possess the attribute of **Currency** exactly like Bank Notes.

Bills of Exchange.—In *Peacock v. Rhodes* (2 Douglas, 633) the Court decided that Bills of Exchange possess the attribute of Currency exactly like Bank Notes. Lord Mansfield said, "The holder of a Bill of Exchange, or Promissory Note, is not to be considered as the assignee of the payee. An assignee must take the thing assigned, subject to all the equity to which the original party was subject. If this rule applied to Bills and Promissory

Notes, it would stop their Currency. The law is settled that a holder, coming fairly by a Note or Bill, has nothing to do with the transaction between the original parties. I see no difference between a Note indorsed in blank, and one payable to bearer. They both go by delivery, and possession proves property in both cases."

In *Collins v. Martin* (B. & P. 648) the same doctrine of Currency was applied to pledging Bills equally as to selling them. Eyre, C.J., said, "For the purpose of rendering Bills of Exchange negotiable, the Right of Property in them passes with the Bills. Every holder of the Bills takes the Property, and his title is stamped on the Bills themselves. The Property and the possession are inseparable. This was necessary to make them negotiable ; in this respect they differ essentially from goods, of which the property and the possession are in different persons."

Foreign Bonds.—In *Gorgier v. Mievill* (3 B. & C.) Foreign Bonds payable to the holder were decided to possess the attribute of **Currency**, exactly as Bank Notes and Bills indorsed in blank.

Exchequer Bills.—In *Wookey v. Pole* (4 B. & Ald. 1), Exchequer Bills payable in blank, or order, were also decided to possess the attribute of Currency. The question was whether Exchequer Bills followed the law of goods, in which there is the *Jus vindicandi*, or the law of Money, in which there is no *Jus vindicandi*, except in the case of the owner finding it in the possession of the thief or finder. The Court held that Exchequer Bills follow the law of Money. Holroyd, J., said, "It has long been fully settled that Bank Notes, or Bills, Drafts on bankers, Bills of Exchange, or Promissory Notes, either payable to order, and indorsed in blank, or payable to bearer, when taken *bonâ fide*, and for a valuable consideration, pass by delivery, and vest a right in the transferee, without regard to the title, or want of title, in the person transferring them These authorities shew that not only Money itself may pass, and the Right to it may arise by **Currency** alone ; but further, that these mercantile instruments, which entitle the bearer of them to money, may also pass, and the Right to them arise in like manner by **Currency** or **Delivery**. . . . We next consider the nature and effect of the instrument, both as to the property which it concerns, and as to its **Negotiability** by law . .

. . . The instrument is created by the Statute, 48 Geo. III., c. 1, and is thereby made **Negotiable** and **Current** The case therefore stands thus : The Exchequer Bill was a **Current**

and **Negotiable** instrument for the payment of Money. Now Money passes from one person to another by reason of its **Currency**, and for that reason only, and not because it has no earmark, it cannot be recovered from the person to whom it has passed. The Exchequer Bill, therefore, seems to me upon the same principle to follow the nature of Money, for which it is a security."

In *Ingham v. Primrose* (7 C.B.N.S. p. 8) Williams, J., said:—
"It is, we think, settled law that if the defendant had drawn a Cheque, and if before he had issued it, he had lost it, or had it stolen from him, and it had afterwards found its way into the hands of a holder for value, without notice, who had sued the defendant upon it, he would have had no answer to the action. So if he had indorsed a Bill in blank, or a Bill payable to his order, and if it had been lost or stolen before he had delivered it to any one as indorsee. The reason is that such Negotiable Instruments have, by the law merchant, become part of the **Mercantile Currency** of the country; and in order that this may not be impeded, it is requisite that innocent holders for value should have a right to enforce payment of them against those who, by making them, have caused them to be part of the **Currency**."

In *Whistler v. Foster* (14 C.B.N.S. 248) Willes, J., said, "The general rule of law is undoubted, that no one can transfer a better title than he himself possesses: *Nemo dat quod non habet*. To this there are some exceptions, one of which arises out of the rule of the law merchant as to Negotiable Instruments. These being a part of the **Currency**, are subject to the same rule as Money."

In *Shute v. Robins* (1 M. and M. 133) Lord Tenterden spoke of bankers' paper as being part of the Circulating Medium of the country.

In *Lang v. Smith* (7 Bing. 284) Tindall, C. J., said, "The first question was, whether the instruments in dispute had acquired from the course of dealing pursued in the City the character of Bank Notes, Cheques, Bills of Exchange, Dividend Warrants, Bills or other instruments which form part of the **Currency** of the country."

In *Goodwin v. Robarts* (L. R., 10 Excheq. 377) scrip entitling the bearer to demand Bonds from a Foreign Government were also decided to possess the attribute of Currency.

These extracts authoritatively decide the true meaning of the word **Currency**. It means that the Property to which this attribute is attached is an exception to the general *jus vindicandi* which attaches to goods.

It means that when once this class of property has been acquired by a purchaser honestly in the way of business, the property in it passes by delivery. And this is the sole meaning of the word **Currency**.

These cases decide that Money and all written Securities for money made transferable by the parties to them are all included under the term **Currency**.

We may now observe that it is a great misfortune that the word **Currency** has established such a hold in Economics. Because it is not an Economical term at all. Circulating Medium is a technical term in Economics, and denotes a certain class of Quantities about which there can be neither mistake nor doubt. But Currency is a pure term of Mercantile Law, and has nothing to do with Economics. Circulating Medium is the name of a certain class of Quantities, but Currency is an *attribute* of certain Quantities, and to call the Quantities themselves by the name of an attribute is as absurd as to call a Wheel a *Rotation*, or a Horse a *Velocity*. Supposing that the *Jus vindicandi* were taken away by law, everything would be Currency; suppose that the *Jus vindicandi* were accorded to Money and Securities for Money, nothing would be Currency.

Nevertheless the word is too firmly established to be abolished, and, therefore, the only plan is to remember that it is absolutely synonymous with Circulating Medium, and includes Money and Credit in all its forms, both written and unwritten.

On Banking Credits, or Deposits, as Money and Currency.

It has been shown above that the term **Circulating Medium** means the medium which circulates commodities, and hence, *ex vi termini*, it necessarily includes Money and Credit in all its forms both written and unwritten, because if a person buys goods on Credit, or by issuing a Right of Action, that Credit or Right of action circulates the goods equally, whether it is recorded on paper or not.

So we have shown that Money, and all Rights to Money recorded on some material which can be lost, or stolen, and passed away by manual delivery, are included under the term **Currency**.

A superficial difficulty, however, arises when the term Currency is used as synonymous with Circulating Medium, because there is a vast mass of Credits which have circulated goods, and are therefore Circulating Medium, which are not recorded on any

tangible and transferable material, and therefore are not Currency in its strict legal sense, such as **Deposits**, or Debts in bankers' books, and Book Debts in traders' shops, and other kinds of verbal Credit.

The slightest reflection, however, will show that there is no real difficulty in the case. A Right of Action, Credit, or Debt is exactly the same in its nature, whether recorded on paper or not. And it can be bought and sold, or exchanged, with perfect facility in either form. In Roman Law, in which written instruments were not used, if it was wanted to transfer a debt, the Creditor, the Debtor, and the Transferee met together: the Creditor transferred the Debt orally to the Transferee, and the Debtor orally agreed to pay the Transferee, instead of his original Creditor. This was a complete and valid transfer of the Debt. The same mode of proceeding is equally a valid transfer of the Debt in English law. But in many cases this is a clumsy and inconvenient way of transferring a Debt. It is infinitely more convenient to write it down on paper: and then it can be transferred like Money and any other chattel. But whether the transfer be effected orally or by written document can make no possible difference in the nature of the Right. Recording a Credit, Debt, or Right of Action, therefore, on paper does not create any new Right, it merely records an already existing Right on paper. Payment, therefore, by means of a Bank Note, or Cheque, or Bank Credit, termed a Deposit, is absolutely the same. Now, Bank Notes and Cheques are Currency in strict legal phraseology: but Bank Credits, or Deposits, are not Currency in strict legal phraseology, because they cannot be lost, mislaid, stolen, and passed away in commerce by manual delivery.

So also of a Book Debt in a tradesman's books. If a tradesman buys goods from a merchant on credit, that Credit has performed exactly the same function in **Circulating** the goods as money: because we have shown that the word Circulation means buying goods with Money or Credit: and the Credit has been equally the medium of Circulation, or Sale, whether it is recorded on paper or not: but it is not Currency because it cannot be dropped in the street, stolen and transferred to some one else by manual delivery.

Nevertheless, all these Book Credits, or Debts, in the books of bankers and traders are exactly of the same nature as if they were recorded as Circulating Paper, and they can always be recorded on paper at the will of the parties: when they become Currency in the strictest legal sense of the term.

If, then, we are compelled to adopt this barbarism, and employ the term *Currency* to denote a certain class of Economic Quantities, synonymous with *Circulating Medium*, it must, by the laws of philosophy, be held to include *Bank Credits*, or *Deposits*, *Book Debts*, and *Verbal Credits* of all sorts.

And this is exactly what *Mercantile Law* does. It treats any form of *Credit* payable by a banker on demand, whether it be a *Bank Note*, *Cheque*, or *Deposit*, as *Money* or *cash*. They are all equally in the eye of the law *payment*: that is, none of them are *legal money*: that is, a debtor cannot compel his *Creditor* to take *payment* in them of a *Debt*: but if a *Creditor* chooses to do so, of his own accord, without objection, they all stand on exactly the same footing as *payment*.

With regard to *Cheques*, Lord Mansfield said, in *Grant v. Vaughan*, that a *Cheque* is the same thing as a *Bank Note*.

In *Pearce v. Davies*, Patteson, J., said that a *Cheque* operates as *payment* until it has been presented and refused.

So in *Jones v. Arthur* (8 Dowe., 442) Coleridge, J., held that tender of *payment* by *Cheque* is good unless objected to on that account.

In *Bevan v. Hill* (3 Camp., 381), where a person having accepted a *Cheque* in *payment* and lost it, and the banker failed having funds to meet the *Cheque*, Lord Ellenborough held that the *Cheque* was *payment*.

The very same doctrine is true regarding a *Bank Credit* or *Deposit*.

In *Gillard v. Wise* (5 B. and C., 134) Holroyd, J., said—"The defendants instead of sending a clerk to receive cash for the notes, sent them to the persons who ought to have paid them; but they sent them, not for the purpose of being paid in money, but of being placed to their credit in account. When that credit was given, the legal effect was the same as if the notes had been paid to them in money."

Thus a *Right of Action* against a banker, payable on demand, is in the mercantile community considered as *money*, or *cash*, whether it be in the form of a *Bank Note*, a *Cheque*, or simply a *Bank Credit*, or *Deposit*; and though, of course, in the strict legal sense, only the two former are **Currency**, and yet in a philosophical sense, if we are constrained to adopt the word, all three forms must be **Currency**.

And so in other points of law, *Bank Notes* and *Bank Credits* are held to be included in the terms *Money*, or *Cash*. In the case of *Lord Aylesbury's Will*, Lord Hardwicke held that *Bank Notes*

passed under the title of cash; and in *Miller v. Race*, Lord Mansfield said—"Bank Notes pass by a will which bequeaths all testator's **Money or Cash.**"

And the very same doctrine is held respecting a Bank Credit, or Deposit, or a balance on a banking account.

Thus in *Vaisey v. Reynolds* (5 Russell, 12) the testator bequeathed to his wife all his book debts, *monies in hand*; and to his executors, all his monies out at interest or mortgage, notes of hand, or any security whatever. Lord Lyndhurst said—"The testator has referred to two descriptions of money, monies in hand, and monies out at interest or mortgage, notes of hand, and other securities. The balance in the banker's hands, though it carries interest, was not out at interest or security, and it was in the same order and disposition of the testator as if it had been deposited in his own drawer. It must be inferred that the testator meant to pass it by one of the two descriptions which he used. In no sense was it money as security, and in a reasonable sense it was money in hand, and passed therefore to the wife."

So in *Taylor v. Taylor* (1 Jurist, 401), where the testator bequeathed all his ready money, Lord Langdale said—"It is true that in strict legal language, what is called money deposited at a banker's, is nothing more than a Debt, and cannot be called ready money; but in the ordinary language of mankind, money at a banker's is called ready money, and we must construe a will according to the ordinary language of mankind."

So again in *Parker v. Marchant* (1 Y. and C. 290), Bruce, V.C., said—"Undoubtedly an ordinary balance at a banker's is, in a sense, a Debt due to him—certainly he may be sued for it as a Debt. But it may be equally true that in a sense it is ready money. . . . The term "Debt," however technically correct, is not colloquially or familiarly applied to a balance at a banking-house. No man talks of his banker in that character being indebted to him. Men speaking of such a subject, say that they have so much at their banker's, or so much in their banker's hands; a mode of expression indicating virtual possession, rather than the right to which the law applies the term *chose-in-action*. . . . Agreeing that the term (ready money) is applicable to money in the purse or the house, I cannot agree that it is confined to money so placed. Money paid into a banking-house in the ordinary mode, is so paid for the purpose of being not safe merely, but *ready* as well as safe." And consequently the V.C. held that a Bank Credit, or Deposit, passed under the term "ready money."

And this opinion was confirmed on appeal (1 Phil., 356) by Lord Lyndhurst—"Nobody can doubt that in the ordinary use of language, money at a banker's would be considered as 'ready money.' Everybody speaks of the sum which he has at his banker's as money: 'My money at my banker's,' is the usual form of expression, and if it is money at the banker's, it is emphatically 'ready money,' because it is placed there for the purpose of being ready when occasion requires; it is received upon the understanding that it shall be so ready. If a man goes to his banker, the money is counted out to him on the table. If he sends an order for the money it is counted out to his servant, or the person in whose favour that order is made. I consider, therefore, that it is strictly 'ready money,' according to the ordinary acceptance of these terms among mankind."

So in *Manning v. Purcell* (2 Sm. and Giff., 284) the question was whether a balance on a current account, and a balance on a deposit account, payable on demand, passed under the word moneys in a will. Stuart, V.C., said—"The question as to the next subject of gift, which the plaintiffs deny to be included in the gift of 'moneys,' is as to the balances of the testator at his banker's. The testator seems to have had balances upon a current account, and balances upon a deposit account. Now the balance upon the current account certainly passed. It is also my opinion that the money, the evidence of which was the deposit notes, also passed under the description of 'moneys.' It has been maintained in argument, that the deposit notes are the vouchers given by the bankers with whom the deposits were made, as security for money, and they have been likened to the case of money secured by a bond. It is said that the balance due is simply a Debt, and the deposit notes are evidence of the debt; just as a bond which shews a debt, and binds the obligor to the payment of it. But money deposited by a testator with his bankers, on a deposit account, the balance carrying interest, is so much money at the disposal of the testator, and is as readily accessible by him as moneys in an ordinary current account. The fact that interest is allowed upon these deposits is a reason for the depositor more reluctantly drawing upon his deposit account, but in point of fact there is no distinction at all shown to me upon the custom of bankers. The bankers have been examined in this case, and the habit is so notorious as this that it would not require evidence to shew that where a banker holds money for which he gives a deposit note, it is just as accessible to his customer as if it was held on a current account.

“If a customer, having a balance of £10,000 at his banker's, wants £1000 he must take a piece of paper and deliver it to the bankers, before the bankers would pay him the money which they hold for him. Now, with respect to the deposit-money, the customer if he wants that money, or any part of it, must bring the deposit receipt instead of an ordinary Cheque; but that does not make it less accessible to him than if the bankers held it liable to be paid on Cheques. If the slightest doubt were cast upon the accessibility of a depositor's money which a banker holds as deposit receipts, it would soon put an end to the account altogether.

“My decision proceeds upon this, that as to the deposit notes, as much as to the current account, the relation of banker and customer exists; that the banker, holding money of a customer, whether as a deposit account or a current account, unless there is some express contract to take it out of the ordinary case of deposit, holds it as money; and as money so readily accessible to the customer, or the relation of banker and customer, that it is held to pass under the description of money generally.”

The importance and the practical bearing of these investigations and decisions are evident. All banking advances are made in the first instance by creating Bank Credits or Deposits, in favour of the customer. These Deposits are simply Rights of Action, or simple contract Debts. Now these Rights of Action, Credits, or Debts, are the “goods and chattels,” or property of the customer, which are exactly of the same value as money, because they can be always exchanged for money instantly on demand. But the customer wishes to use these Credits as money, and transfer them to someone else. This may be done by writing them down on paper either as Notes or Cheques. But it is evident that the property or “goods and chattels” are identically the same, whether they are written down on paper or not. Now, many persons seeing a material Bank Note or Cheque, are willing to admit that they are cash. But from the want of a little reflection, and ignorance of the mechanism of banking, they feel a difficulty with regard to what they see as Deposits. They admit that a Bank Note or a Cheque, is an “Issue,” and Currency or Circulating Medium, but they fail to see that a Bank Credit is exactly in the same sense equally an “Issue,” “Currency,” and Circulating Medium.

When unreflecting persons see so many figures in a book, they are sometimes startled at hearing them called Wealth, but, in fact, it is not these figures in the ledger that are the Wealth; these figures are only the evidence, the register, and the acknowledgment of so

many Rights of Action, Credits, or debts, which are the property or goods and chattels of the creditors of the banker ; these Rights of action are just as much “issued” and in “circulation” as if they were Notes ; they are equally Rights of Action to demand gold, and it makes not the slightest difference in their nature whether they are recorded as paper or not. The figures in the book are a mere reminder to the banker that he is bound to pay them in gold if demanded.

Thus these Bank Credits, or Deposits, are a mass of Exchangeable Property, like so much gold, or corn, or timber or any other, and their value depends upon exactly the same thing as the value of anything else ; whether they can be paid in gold on demand, and for this reason they are termed *Pecunia*, *Res*, *Bona*, *Merx* in Roman Law : *χρήματα*, *πράγματα*, *ἀγαθά*, *οὐσία*, *οἶκος* in Greek Law, and Goods, Goods and Chattels, Chattels, Merchandise, Vendible Commodities, and Incorporeal Wealth in English Law ; and it was the unanimous doctrine of Statesmen and Economists, until the time of Lord Overstone and his sect, that Money and Credit in all its forms and varieties, both written and unwritten, constitute the Currency or Circulating Medium, which is amply confirmed by the decisions of the Courts of Law which we have so copiously quoted.

On Lord Overstone's Definition of Currency.

We have now explained the true meaning of the words Circulating Medium and Currency, and fortified our exposition by a series of unanimous decisions of the Courts of Law, so as to render it perfectly unassailable. The question, however, is of such importance that we must now examine at length the doctrines of Lord Overstone and his sect, as the whole monetary and banking system of this country is at present based upon a peculiar definition of theirs, and we must allow them to speak for themselves.

Disputes about the meaning of the term Currency began about 1800 ; but we need pay no attention to them, because they had no practical effect.

The question, “What the term Currency includes?” was vehemently discussed before the Committee on Banking, in 1840 ; and by this time a strong and influential party had adopted a certain definition which prevailed with Sir Robert Peel, and upon which the Bank Act of 1844 is founded.

The leaders of this party were Mr. Samuel Jones Loyd, afterwards Lord Overstone, Mr. George Warde Norman, and

Colonel Torrens; and we shall now let them explain their own views.

Mr. George Warde Norman, a director of the Bank of England, was asked:

Q. 1691. Are there any grounds for considering the Deposits of the Bank of England as Currency?—No, I think not.

Q. 1692. Do you consider that any Deposits, merely in their character of Deposits, can be considered as Currency?—No, I do not.

Q. 1693. Will you state what, in your opinion, forms the distinction between Currency and Deposits?—I consider that, looking broadly at Deposits and Currency, they are quite distinct; they have little to do with each other. But I conceive that the use of Deposits is one of the banking expedients which is available for economising Currency, along with a great many others. I do not consider them as Currency, or Money. I ought to observe, perhaps, to the Committee, that I employ the words “Money” and “Currency” as synonymous. Deposits are used by means of transfers made in the books of bankers; and these afford the means of adjusting and settling transactions, and *pro tanto* dispense with a certain quantity of Money; or they may be set off against each other, from one banker to another, to a certain extent, and thus produce the same effect. Still they possess the essential qualities of Money in a very low degree.

Q. 1694. Do you entertain a similar opinion as to Bills of Exchange?—Yes, exactly. I think they are also used to economise Currency. I look upon them as banking expedients for that purpose; but they do not possess fully the qualities which I consider Money to possess.

Q. 1695. Will you explain the difference between the functions which Money will perform, and those which Bills of Exchange, or Deposits, will perform?—To answer that question fully, one must, I am afraid, take rather a wide view; but I look upon it that the three most essential qualities Money should possess are that it should be in universal demand by everybody, in all times and in all places; that it should possess fixed value; and that it should be a perfect numerator. There are other qualities, but I think these are the most essential. Now, when I look at all banking expedients, I find that they do not possess these qualities fully. They possess them in a very low degree; and therefore, as we see took place in 1835, with a very large increase of the Deposits of the Bank, the Circulation diminished; and there was every appearance

of the effects of contraction; and there was an increased influx of treasure; and I conceive from that there were lower prices. By a numerator, I mean that which measures the value of other commodities with the greatest possible facility. If we look at all these banking expedients, we see that they possess the three qualities which I have mentioned in a very much lower degree.

Q. 1696. Will you state in what respect?—I can only take them one by one. A Bill of Exchange is an instrument commonly payable at some future time: at a certain place: and to some particular individual: it is of no use to any other individual, except it is indorsed to him. A man cannot go into a shop and buy what he wants: he could not pay his labourers with a Bill of Exchange. The same with a banker's Deposit: he can do nothing of that sort with that, he can do with less Money than he would otherwise employ if he has Bills of Exchange or bankers' Deposits: but he cannot, with Bills of Exchange or bankers' Deposits, do whatever he could with sovereigns and shillings. By a banker's Deposit, I mean a Credit in a banker's books: nothing more or less than that.

Mr. Samuel Jones Loyd, afterwards Lord Overstone, was asked—

Q. 2655. What is that you include in the term Circulation?—I include in the term Circulation, metallic Coin, and paper Notes, promising to pay the metallic Coin to bearer on demand.

Q. 2661. In your definition, then, of the word Circulation, you do not include Deposits?—No, I do not.

Q. 2662. Do you include Bills of Exchange?—No, I do not.

Q. 2663. Why do you not include Deposits?—To answer that question, I believe I must be allowed to revert to first principles. The precious metals are distributed to the different countries of the world by the operation of particular laws, which have been investigated, and are now well recognised. These laws allot to each country a certain portion of the precious metals, which, while other things remain unchanged, remains itself unchanged. The precious metals converted into coin, constitute the Money of each country. That coin circulates sometimes in kind: but in highly advanced countries, it is represented to a certain extent by paper Notes, promising to pay the Coin to bearer on demand: these Notes being of such a nature in principle, that the increase of them supplants Coin to an equal extent. Where these Notes are in use, the metallic Coin together with these Notes, constitute the Money, or Currency, of that country. Now this money is marked by certain distinguishing characteristics: first of all, that its amount is determined by the laws which apportion the precious metals to the

different countries of the world: secondly, that it is in every country the common measure of the value of all other commodities: the standard by reference to which the value of every other commodity is ascertained, and every contract fulfilled: and thirdly, it becomes the common medium of exchange for the adjustment of all transactions equally at all times between all persons, and in all places. It has, further, the quality of discharging these functions in endless succession. Now I conceive that neither Deposits nor Bills of Exchange, in any way whatever, possess these qualities. In the first place, the amount of them is not determined by the laws which determine the amount of the precious metals in each country: in the second place, they will in no respect serve as a common measure of value, or a standard, by reference to which we can measure the relative value of all other commodities: and in the next place they do not possess that power of universal exchangeability which belongs to the money of the country.

Q. 2664: Why do you not include Bills of Exchange in Circulation?—I exclude Bills of Exchange for precisely the same reasons that I have stated in my former answer for excluding Deposits. There is another passage in the same report which appears to me to show very clearly that the French Chamber have fully appreciated the distinction between Bills of Exchange and Money: “Every written obligation to pay a sum due may become a sign of the Money: the sign has acquired some of the advantages of Circulating Money: because, like Bills of Exchange, it may be transmitted by the easy and prompt method of indorsement. But what obstacles there are! It does not represent at every instant to its holder the sum inscribed on it: it can only be paid at a distant time: to realise it at once, it must be parted with. If one finds anyone sufficiently trustful to accept it, it can only be transferred by indorsement. It is an eventual obligation which one contracts one’s self, and under the weight of which, until it is paid, one’s credit suffers. One is not always disposed to reveal the nature of one’s business by the signatures one puts in circulation. These inconveniences led people to find out a sign of money still more active and more convenient, which shares, like the Bill of Exchange, the qualities of metallic money, because it has no other merit but to represent it, but which can procure it at any moment: which, like the piece of money, is transferred from hand to hand, without the necessity of being guaranteed, without leaving traces of its passage. The Note payable to bearer on demand, issued by powerful associations formed under the authority, and acting under the continual

observation of Government, has appeared to present these advantages. Hence Banks of circulation."

Q. 2665. Under similar circumstances, will the aggregate amount credited to depositors in bankers' books bear some relation to the quantity of money in the country?—I apprehend that it is dependent in a very great degree. I consider the money of the country to be the foundation, and the Bills of Exchange to be the superstructure raised upon it. I consider that Bills of Exchange are an important form of banking operations, and the Circulation of the country is the money in which these operations are to be adjusted; any contraction of the Circulation of the country will, of course, act upon credit. Bills of Exchange, being an important form of Credit, will feel the effect of that contraction in a very powerful degree; they will, in fact, be contracted in a much greater degree than the paper Circulation.

Q. 2667. *Sir Robert Peel*: What are the elements which constitute Money, in the sense in which you use the expression "quantity of money"? What is the exact meaning you attach to the words "quantity of money—quantity of metallic Currency?"—When I use the words "quantity of money," I mean the quantity of metallic Coin and of paper Notes, promising to pay the Coin on demand, which are in circulation in this country.

Q. 2668. Paper Notes payable in Coin?—Yes.

Q. 2669. By whomsoever issued?—Yes.

Q. 2670. By country banks as well as other banks?—Yes.

Q. 2671. *Chairman*: Would the superstructure, consisting of sums credited to depositors in bankers' books and Bills of Exchange, equally exist, although no Notes payable in Coin on demand existed in the country?—Yes. I apprehend that every question with respect to Deposits, and with respect to Bills of Exchange, is totally distinct from the question which has reference to the nature of the process of substituting Promissory Notes in lieu of coin, and of the laws by which that process ought to be governed. If the Promissory Notes be properly regulated, so as to be at all times of the amount which the coin would have been, Deposits and Bills of Exchange, whatever changes they may undergo, would sustain these changes equally, either with a metallic Currency, or with a paper Currency properly regulated; consequently, every investigation respecting their character or amount is a distinct question from that which has reference only to the substitution of the paper Notes for Coin.

Q. 2672. There would be no reason why, if there were no Notes payable in Coin on demand, the amount of this superstructure

should be less than it now is with a mixed circulation of specie and of Notes payable on demand?—None whatever. I apprehend that upon the supposition that the paper Notes are kept at the same amount as the metallic Money, the question of the superstructure whether of Deposits or of Bills of Exchange remains precisely the same.

Q. 2673. That answer takes for granted that, in the first case the metallic Currency, and in the second case the metallic Currency, *plus* the Notes payable on demand, are the same in quantity?—Yes.

Q. 2674. *Sir Robert Peel*: You suppose the Notes payable on demand to displace an amount of Coin precisely equal to these Notes?—They ought to do so under a proper regulation of the paper Money, otherwise they are not kept at the same value as Coin.

Q. 2675. *Mr. Attwood*: Would you consider that the superstructure of Bills of Exchange, founded entirely upon a metallic Currency, might at particular times become unduly expanded?—The answer to that question depends entirely upon the precise meaning of the word “unduly.” I apprehend, undoubtedly, that it is perfectly possible that Credit and the consequences which sometimes result from Credit; viz., over-banking in all its forms, and the over-issue of Bills of Exchange, which is one important form of over-banking, may arise with a purely metallic Currency; and it may also arise with a Currency consisting jointly of metallic Money and paper Notes, promising to pay in Coin; and I conceive further, that if the Notes be properly regulated, that is if they be kept at the amount which the coin otherwise would be, whatever over-banking would have arisen with a metallic Currency, would arise, and to the same extent, neither more nor less, with Money consisting of metallic Coin and paper Notes jointly.

Q. 2676. May not over-banking and over-issue of Bills of Exchange, forming a superstructure based upon Money, composed of metal and paper Notes, derange the certainty of the Notes being duly paid in gold?—I apprehend that if the paper Notes be properly regulated, according to the sense which I have already attributed to that expression, and if a proper proportion of gold be held in reserve, the solidity of the basis cannot be disturbed; that is, if there be a proper contraction of the paper Notes as gold goes out, the convertibility of the paper system will be effectually preserved by the continually increasing value of the remaining quantity of the Currency, as the contraction proceeds.

At this time, and for a long period preceding, the greatest part of the Circulating Medium of Lancashire were Bills of Exchange, which sometimes had 150 indorsements on them before they came to maturity. Lord Overstone was asked :

Q. 3026. Does not the principal circulation of Lancashire consist of Bills of Exchange?—As I contend that Bills of Exchange do not form part of the circulation, of course I am bound, in answer to that question, to say No.

Q. 3027. Is there not a large quantity of Bills of Exchange in circulation in Lancashire?—Undoubtedly, wherever a large mass of mercantile or trading transactions take place, there will exist a large amount of Bills of Exchange, and that is the case, to a great extent, in Lancashire.

Q. 3028. Do not the Bills exceed, to an immense amount, the issue of Notes payable on demand in Lancashire?—Undoubtedly they do, to a great extent.

Now, as Bills of Exchange are created for the very purpose of circulating commodities, it is difficult to perceive how Lord Overstone could refuse to admit them to be Circulating Medium.

Mr. Hume had a long fencing-match with Lord Overstone, as to the distinction between Bank Notes and Deposits. Lord Overstone admitted that a Debt might be discharged either by the transfer of a Bank Note or by the transfer of a Credit in the books of a Bank ; but he strongly contended that Bank Notes are Money, and that Bank Credits, or Deposits, are not.

Q. 3148. Do you consider any portion of the Deposits in the Bank of England as Money?—I do not.

Q. 3150. Could 20,000 sovereigns have more completely discharged the obligation to pay the £20,000 of bills than the Deposits did?—Where two parties have each an account with a deposit Bank, a transfer of the Credit from one party to the credit of another party, may certainly discharge an obligation in the same manner and to the same extent to which sovereigns would have discharged that obligation.

Q. 3169. Will not the debt between the two be discharged thereby?—Yes.

Q. 3170. In the one case I have supposed that payment of £1,000 was made by means of Notes in circulation ; payment was made by the delivery of these Notes from one hand to another, and they are transported from place to place ; but in the case of a payment made by means of a transfer in the books of the bank from one account to another, I ask you, are not these payments equally

valid, and would not the debt be discharged equally in either case?—In the one case the debt has been discharged without the necessity of resorting to the use of Money, in consequence of the economising process of deposit business in the Bank of England.

Q. 3171. Can the debt of £1,000 which one person owes to another be discharged without Money being paid, or its value?—A debt of £1,000 cannot be discharged without, in some way or another, transferring the value of £1,000; but the transfer of value may certainly be effected without the use of Money.

Q. 3172. Was not the deposit transfer in the Bank of England to satisfy that debt of £1,000, of the same value as the £1,000 Notes which passed in the other case?—A credit in the Bank of England, I consider, is of the same value as the same nominal amount of Money; and if the Credit be transferred, the same value I consider to be transferred as if Money of that nominal amount had been transferred.

Q. 3177. Is there any fallacy in the statement that in the accounts published by the Bank, their liabilities are divided into two heads, Circulation and Deposits?—I am not prepared to state that there is any fallacy in it.

Q. 3178. Have you not said that Deposits do not in any way whatever possess the quality of Money?—If I have said so, I shall be glad to have that statement laid before me.

Q. 3179. Have you not in question 2663, enumerated certain distinguishing characteristics of Money?—I have.

Q. 3180. Have you not in the same question stated that Deposits do not in any way whatever possess those characteristics?—Yes, I have.

Q. 3181. Have you not, in answer to previous questions, admitted that for the discharge of Debts, Deposits have the characteristics of Money?—All that I have admitted is, I believe, that a Deposit may, under certain supposed circumstances, be used to discharge a certain supposed debt.

Lord Overstone also said (Q. 3132),—Will any man in his common senses pretend to say that the total amount of *transactions* adjusted at the Clearing House are part of the Money, or Circulating Medium of the country?

This paragraph shows great looseness of idea. No one, of course, says that a transaction is Money, but the operations of the Clearing House consist exclusively of the transfers of Bank Credits—which are all goods and chattels, commodities, merchandise of the value of gold—from one bank to another, and most undoubtedly these Bank

Credits are part of the Currency or Circulating Medium of the country, and are included in law under the term "ready money."

Lord Overstone further said (Q. 3082)—When I give a definition of "Currency," of course, it is Currency in the abstract ; it is that which Currency ought to be ; that definition properly laid down and properly applied, will include Paper Notes payable on demand, and it will exclude Bills of Exchange.

Here, again, Lord Overstone is absolutely in error. The term Currency is, as we have shown, purely a legal term, and means anything of which the property passes by delivery and honest acquisition. Now Bank Notes and Bills of Exchange have each this property in common, and therefore they are each Currency.

Lastly we may quote Colonel Torrens, because he was not only one of the most influential of the sect, but it has been alleged that he was in reality the author of the scheme for dividing the Bank into two departments, which Sir Robert Peel adopted in the Bank Act of 1844.

He says (*The Principles and Practical operation of Sir Robert Peel's Act of 1844 defended*, p. 79)—"The terms Money and Currency have hitherto been employed to denote those instruments of exchange which possess intrinsic or derivative value, and by which from law or custom, debts are discharged and transactions finally closed. Bank Notes payable in specie on demand, have been included under these terms as well as Coin, because by law and custom the acceptance of the notes of a solvent bank, no less than the acceptance of coin, liquidates debts and closes transactions ; while Bills of Exchange, Bank Credits, Cheques, and other instruments, by which the use of Money is economised, have not been included under the terms Money and Currency, because the acceptance of such instruments does not liquidate debts and finally close transactions."

Again, he says, in reply to some perfectly just observations of Fullarton—"It is an obvious departure from ordinary language to say that whether a purchase is effected by a payment in Bank Notes, or by a Bill of Exchange, the result is the same. According to the meaning of the terms Money and Credit, as established by the universal usage of the market, a purchase effected by a payment in Bank Notes is a ready money purchase [so is a purchase effected by a cheque], while a transaction negotiated by the payment of a Bill of Exchange, is a purchase upon Credit. In the former case the transaction is concluded, and the vendor has no further claim upon the purchaser ; in the latter case the transaction is not concluded,

and the vendor continues to have a claim upon the purchaser until a further payment has been made in satisfaction of the Bill of Exchange. A Bank Note liquidates a Debt, a Bill of Exchange records the existence of a debt, and promises liquidation at a future day. Mr. Fullarton not only inverts language but misstates facts, when he says that the transactions of which Bank Notes have been the instruments must remain incomplete until the Notes shall be returned upon the issuing bank, and discharged in cash. A Bank Note for £100 may pass from purchasers to vendors many times a day, finally closing on the instant each successive transaction. A Bill of Exchange may also pass from purchasers to vendors many times a day, but no one of the successive transactions, of which it is the medium, can be finally closed until the last recipient has received in *Coin* or *Bank Notes* the amount it represents."

The simple answer to this last statement is, that probably not one Bill of Exchange in high commerce, in the City of London, in 100,000 is ever paid in Coin or Bank Notes; they are paid in Banking Credits.

Colonel Torrens continues—"Now it is the necessity of ultimate repayment which constitutes the main point of distinction, which marks the boundary between forms of Credit and Money. It is a necessity which applies to Bills of Exchange and Cheques, but which does not apply to Bank Notes; and, therefore, upon Mr. Fullarton's own showing, upon his own definition, and his own conditions as to what constitutes Money, Bank Notes come under the head of Money, while Bills of Exchange and bankers' Cheques, and such other instruments as require ultimate payments, transfers, and settlements, do not come under the phase Money. . . . Upon Mr. Fullarton's own showing, Money consists of those instruments only by which debts are discharged, balances adjusted, and transactions finally closed; and therefore Mr. Fullarton, unless he should choose to continue to contradict himself, must admit that Bank Notes are, and Bills of Exchange, Bank Credits, and Cheques, are not, Money."

We have given these long extracts in order that the reader may fully understand the doctrines and principles of the influential sect, whose views were embodied in the Bank Charter Act of 1844. He will at once see that they are based on an arbitrary Definition of the term Currency, which is in diametrical contradiction to the unanimous doctrines of Statesmen and Economists of former times, and the decisions of the Courts of Law; and we have now to examine the logical consequences to which these doctrines lead.

Mr. Norman said that Money or Currency should possess fixed value, and be a perfect numerator.

Now, the value of Money is the various commodities, services, and securities, it can purchase, and as the quantity of all these things which Money can purchase constantly varies from hour to hour, from day to day, and from week to week, how can Money have "fixed value"? We have shown that neither Money nor anything else can have "fixed value" unless everything has "fixed value."

He said that he meant by a numerator that which measured the value of other things with the greatest facility; but does not a Cheque for £50, or a Bill of Exchange for £50, measure the value of things with as great facility as a £50 Bank Note or fifty sovereigns?

It is not a little amusing to find the celebrated phrase of the Roman Catholic Church.—*Quod semper, quod ubique, quod ab omnibus*—starting up and meeting us in a discussion on Currency.

In Lord Overstone's opinion Money and Currency are identical, and include the coined metallic Money, and the paper Notes promising to pay the bearer Coin on demand; and he says that the characteristic of their being Money is, that they are received equally at "*all times, between all persons, and in all places.*"

For the sake of shortness, let us designate this phrase by 3A—from the three Alls in it.

Lord Overstone excludes Bills of Exchange from the designation of Currency because "they do not possess that power of universal exchangeability which belongs to the Money of the country."

This definition is fatal to Lord Overstone's own view. In fact, if it be true, there is no such thing as Money, or Currency, at all.

In the first place, it at once excludes the whole of Bank Notes. The Notes of a Bank in the remote district of Cumberland would not be current in Cornwall; therefore, they are not 3A; *therefore*, they are not Currency. Again, the Notes of a small country bank in Cornwall would not be received in Cumberland; therefore, they are not 3A; therefore they are not Currency.

Similarly, there are no country bank notes which would be generally received throughout England; therefore, no country bank notes are 3A; therefore, no country bank notes are Currency.

Till within the last seventy years or so, Bank of England notes had scarcely any Currency beyond London and Lancashire; in country districts a preference was universally given to local notes; therefore, Bank of England were not 3A; they had not the power of "universal exchangeability"; *therefore*, they were not Currency. Bank

of England Notes, even at the present day, would probably not pass in the greater part of country districts in Scotland. If, therefore, the test of 3A and "universal exchangeability" be applied, the claims of all Bank Notes to be considered as Currency are annihilated at once.

But the universality of Lord Overstone's assertion, is fatal to his argument in other ways. On the Continent, at least in France and elsewhere, Silver is legal tender to any amount. In England, silver, like copper, is merely coined into small tokens, called shillings, &c., which are made to pass current above their natural value, and are only legal tender to a very trifling amount ; hence silver in England cannot be used in the adjustment of *all* transactions ; therefore, it is not 3A ; therefore, it is not Currency. There are other countries, such as India, where gold is not a legal Tender ; therefore it fails to satisfy Lord Overstone's test ; therefore, it is not Currency. If then, the test proposed by Lord Overstone is to be accepted, it is easy to see that there is no substance or material whatever which does not fail under it, and, therefore, *there is no such a thing as Currency*.

The fact is that the only difference between a Bank Note and a Bill of Exchange is, that the Note is a Right to payment on demand, and a Bill is a Right to payment at a future time. For this reason a Bank Note possesses a greater *degree* of circulating power than a Bill.

In the Midland Counties it used to be quite common for the banks to issue the bills they had discounted with their own indorsement upon them, which made them bank notes ; until the practice was declared to be illegal, and such instruments were declared to be bank notes.

Moreover, there is not the same inducement to put a Bill into circulation as a Note, because the former increases in value every day until it is paid, while the latter does not. But it is to the last degree unphilosophical to maintain that these two instruments are of different *natures* because they are adapted to circulate in different degrees.

Colonel Torrens has adduced several legal and practical reasons in support of the views of his sect. The poet says :

" Ah me ! what perils do environ
The man who meddles with cold iron."

So are the perils which environ the lay dreamer who meddles with mercantile law and practical business. All Colonel Torrens's reasons are absolutely fallacious both in law and practice.

He includes Bank Notes in, and excludes Cheques from, the title of Currency, because, he says, by law and custom the acceptance of the Notes of a solvent bank liquidates debts and closes transactions ; whereas the acceptance of Cheques does not liquidate debts and close transactions.

In this Colonel Torrens is absolutely wrong, as any tyro in Mercantile Law would tell him.

Bank Notes, Cheques, and Bank Credits, stand exactly on the same footing as to liquidating debts and closing transactions.

No debtor can compel his Creditor to accept an ordinary Bank Note, Cheque, or Bank Credit, in payment of a Debt ; but if he chooses to do so voluntarily they all equally liquidate Debts, and close transactions.

Tender of a Cheque is equally good tender of payment as the tender of an ordinary Bank Note.

And when the bank has transferred the Credit from the debtor's account to that of the creditor's, it liquidates the debt, and closes the transaction, in all respects as if it had been a payment in Money.

If a creditor accepts payment by Cheque, and keeps the Cheque an undue time, without presenting it for payment, and the bank fails, having sufficient Credit on the debtor's account to meet his Cheque, the debt between the creditor and debtor is liquidated and the transaction closed. The creditor has made the Cheque money.

And if the Credit has been once transferred from the account of the debtor to that of the creditor the debt as between the parties is liquidated, and the transaction closed, even though the bank should fail immediately afterwards.

But Colonel Torrens's statement of facts is equally erroneous as his statements of law.

He alleges that a transaction by a Bill of Exchange is not finally closed until the Bill *has been paid in Coin or in Bank Notes*.

It is the idea of Colonel Torrens, Mill, and other dreamers, who have not the slightest knowledge of the mechanism of modern banking, that all Bills of Exchange and Cheques are ultimately paid in Coin or Bank Notes ; at which all bankers and persons conversant with the mechanism of modern banking would make themselves very merry.

In modern banking, in the City of London, probably not one Bill of Exchange in 100,000, and only a very small proportion of Cheques, are paid in Coin or Bank Notes.

An investigation, instituted by some bankers after the late Gold

and Silver Commission, showed that only .0025 per cent. of banking transactions are settled in Coin.

No doubt 250 years ago, before the institution of banking, all bills were paid in money, but as soon as banking attained any magnitude, persons who had bill transactions must have been customers of the same bank; and in all such cases bills were paid and discharged by means of Bank Credits and not by money.

Before the institution of the Clearing House in 1776, all banking charges were settled by Coin and Bank Notes, and banking charges were settled by the mutual exchange of the securities; and it was only the inequality of these exchanges which were paid in Bank Notes. This, of course, enormously diminished the number of Cheques and Bills which were paid in Bank Notes or Money, but in recent years almost all the banks, including the Bank of England, have entered the Clearing House; and even most of the banks which are not in the Clearing House themselves, pass their Cheques and Bills through banks which are. And by a further improved system of clearing, no Money or Bank Notes are now used at all. At the present time about £7,000,000,000 of Cheques and Bills are paid and discharged in the London Clearing House alone, without the use of a single coin or Bank Note; and besides that there is a Country Clearing House, and a Clearing House in all the great towns. What then becomes of the foolish fancy of Torrens, Mill, and so many others, that all Cheques and Bills are ultimately paid in Coin and Bank Notes? *They are all paid and discharged by Bank Credits.*

Thus, when Torrens and his sect maintain that the criterion of Currency is that it liquidates debts and closes transactions, and they maintain that Bank Credits, or Deposits, are not Currency, they are hoist with their own petard, because, as a matter of fact, in modern banking, all banking transactions are liquidated and closed by Bank Credits, or Deposits.

Bank Credits, or Deposits, are now for all practical purposes the **Current Coin** of the **Realm**.

Consequences of Lord Overstone's Definition of Currency.

We have now to point out the necessary consequences to which Lord Overstone's Definition of Currency leads, which may somewhat surprise its advocates.

Lord Overstone's dogma asserts that the fundamental essence of Money, or Currency, is that it "closes a debt."

To this we reply, as was the fashion in the glorious old days of special pleading—(1) There is no debt to close ; (2) It does not close the debt.

1. When money is exchanged for goods, no debt arises ; and if it be said that the money closes the debt which would have arisen on the sale of the goods, we reply that the goods equally close the debt which would have arisen on the sale of the money. It is simply an exchange ; the money and the goods equally close the debt which would have arisen on either side. Therefore, if the essence of Currency be to “close debt,” the goods are Currency for precisely the same reason that Money is.

2. It is quite common in the City to close a debt with Stock, therefore, by this dogma, Stock is Currency.

3. In numerous cases debts are closed by a payment in goods. Traders often exchange goods ; that is barter. Now, by the exchange of goods, the debt is closed as effectually on each side as by money. Hence, by this dogma, the goods exchanged on each side are Currency.

4. Two merchants may issue acceptances for the same amount, payable on the same day. These merchants may chance to get possession of each other's acceptances. If so, each merchant may tender to the other his acceptance in payment of the debt due by himself. By this exchange the debts are closed on each side. Consequently each acceptance, according to Lord Overstone's dogma, is Currency, as they are Money in law.

In the great Continental fairs, merchants exchanged their acceptances by millions ; the debts were closed, and therefore they were Money or Currency.

5. A merchant issues his acceptance, which gets into the hands of a banker. The banker issues notes, which get into the hands of the merchant. When the banker presents his acceptance to the merchant for payment, the merchant pays the banker in his own notes. By this exchange the debt on each side is closed ; hence, by Lord Overstone's own dogma, the acceptance is equal by Money and Currency as the Notes.

6. Or the merchant issues an acceptance, which gets into the hands of his own banker. When the acceptance falls due, the banker simply writes off the amount from the merchant's account. Both debts are then closed, and, according to Lord Overstone's own dogma, the acceptance and the deposit are equally Money and Currency.

7. If two persons, A and B, are customers of the same bank, and A owes B a debt, A gives B a cheque on his account, B pays the

cheque into his account, the banker transfers the Credit from A's account to B's, and the debt is closed by Novation. Hence, by Lord Overstone's own dogma, the Deposit is Money and Currency.

Thus Lord Overstone's dogma is transfixed by shafts drawn from his own quiver.

The same doctrine may be extended to other cases :—

8. A person buys a ticket from a railway company. The company is then in debt to him for a journey. But when the company have carried him to his journey's end, the debt is closed. Therefore, by Lord Overstone's dogma, the railway journey is Money or Currency.

9. A person buys an opera ticket. The manager is then indebted to him for a performance. When the person has seen the performance, the debt is closed. Hence, by Lord Overstone's dogma, the performance of the opera is Money and Currency.

10. A person buys a postage stamp. The Post-office is then in debt to him for the carriage of a letter. When the letter is carried to its destination, the debt is closed. Hence, by Lord Overstone's dogma, the carriage of a letter is Money and Currency.

And the same principle may be applied to many other cases, which will readily supply themselves to the intelligence of the reader. And, in short, it may be said that in all exchanges whatever, according to Lord Overstone's dogma, each object exchanged, whatever its form may be, is Money and Currency.

In the next place, by the unanimous consent of Economists, a payment in Money does not close the Debt.

Economists affirm that the transaction is not closed until a satisfaction has been obtained for the one originally given. They therefore held that in an exchange for money, the exchange is not consummated or completed.

A baker, say, wants shoes. He sells his bread for money. But can he wear the money as shoes? Certainly not ; he must exchange away his money for shoes. Consequently, the Economists held that the exchange was not consummated or completed, and the debt closed, until the baker has got the shoes in exchange for the bread.

For this reason, all Economists, from Aristotle to the present time, have perceived and declared that money itself is only a species of **Credit**, or general Bill of Exchange, as we have shown by a whole catena of writers. Hence Money and Bills of Exchange are fundamentally analogous. They are merely the evidence of a debt due to their possessor. And the payment of a Bill of Exchange in money is only the exchange of a particular and precarious Right for a general and permanent one.

But as Economists, we have nothing to do with satisfaction and enjoyment, but only with exchanges. The exchange of goods for a bill is one exchange, the exchange of a bill or note for money is another exchange, and the exchange of money for goods is another exchange.

Hence a person who has received Money for goods and services has no more got a satisfaction, in the Economic sense, than the person who has received a Bill of Exchange.

The result of Lord Overstone's dogma is either that there is no such thing as Currency at all, or that everything is Currency.

*Lord Overstone's Definition of Currency violates the
Law of Continuity.*

But the *Law of Continuity* shows the fallacy of Lord Overstone's dogma that Bank-notes payable on demand are Currency. But would not Notes payable one hour, or two hours, or three hours after demand be Currency? Would not Notes payable one day after demand be Currency? or two days, or three days? Lord Overstone denied that Bank post bills, which are payable seven days after sight, are Currency. According to this dogma, if a person receives a Bank-note payable on demand, it is Currency; but if for his own convenience, he asks for one payable seven days after sight, that is not Currency. But seven days after sight the Bill becomes payable on demand; and then, by his own dogma, it is Currency. What was it during the preceding days?

It used formerly to be the custom for country bankers to issue Notes payable three, ten, or twenty days after demand. These Notes circulated just like other Notes. Lord Overstone denied that such Notes are Currency. But by his own dogma they are Currency on the day they become payable. What are they before that?

Cheques are payable on demand, and the acceptance of a Cheque is payment; it closes a debt equally as Notes. How are Cheques not Currency as much as Notes?

A Bill of Exchange is payable on demand the day it becomes due, and, by Lord Overstone's dogma, it becomes Currency on that day. What was it during the preceding term?

It is evident that there can be but one answer. All these instruments are **Currency**, though differing in degree, and the distinction between them is untenable.

Nay, according to this dogma, Bank-notes themselves are only Currency for about seven hours out of the twenty-four, because they

are only payable on demand and during banking hours, say from 9 to 4. As soon as the clock strikes 4 the Notes are not payable till next day, consequently they are not Currency, and do not affect foreign exchanges. Therefore, at five minutes before 4 the Notes are Currency, and affect the foreign exchanges; at five minutes after 4 they are not Currency, and do not affect the foreign exchanges. In the same way, at five minutes before 9 the Notes are not Currency, and do not affect the foreign exchanges; at five minutes after 9 they are Currency, and do affect the foreign exchanges. We leave it to our readers to say whether such dogmas are sound philosophy.

We are happy to say that the distinguished French Economist, Michel Chevalier, entirely agreed with us on this point. After showing the untenable nature of the distinction set up between Bank-notes and Bills of Exchange, he says (*La Monnaie*, sect. 3, ch. 5): "The English language has a generic word which comprehends Money, Bank-notes, Paper Money, or assignats not convertible into specie, and every other kind of security which can be put into circulation, and is accepted more or less generally among men, and that is the word **Currency**. Our language has no precise equivalent; nevertheless, the word *Numéraire* may be taken in the same sense, and I shall employ it for the future in this work." And he gave his formal adhesion to the fundamental nature of a Currency as set forth above. (*Report on my Works to the Academy of Moral and Political Sciences to the Institute of France. Journal des Economistes*, August, 1862.)

THE CLEARING HOUSE.

The Clearing House is an institution by which all the Banks which join in it are formed, as it were, into one huge Banking Institution, for the purpose of transferring Credits from one Bank to another without the use of coin, just in the same way as Credits are transferred from one account to another in the same Bank without the use of coin.

Every banker has every morning claims, on behalf of his customers, against his neighbours, and they have claims, on behalf of their customers, against him. These claims are called bankers' charges.

Formerly it was the custom for every banker to send out his clerks, the first thing every morning, to collect these charges, which had to be paid in money or bank notes. Having collected these charges,

he credited his customers with the sums respectively due to them. The money and the bank notes became the actual property of the banker, but he was obliged to create an equal amount of Credit on behalf of his customers, so that the final result was that there was exactly the same amount of Credit in existence.

But each of his neighbours had also claims, on behalf of their customers, against him. Consequently, every banker was obliged to keep a large stock of money and bank notes to meet these claims. By this system a very large amount of money and bank notes was obliged to be retained among bankers, for the sole purpose of meeting these bankers' charges. It was simply transferred and re-transferred from bank to bank. It never got into general circulation at all, so as to affect business or prices, and it could be made no other use of.

It was stated before the House of Commons many years ago, that one Bank alone, the London and Westminster, was obliged to keep £150,000 in notes for this sole purpose. And if that Bank alone, then in its infancy, was obliged to retain such a sum in notes idle for this sole purpose, what would be the sum necessary to be retained at the present day, by all the Banks, if it were not for the Clearing House?

To remedy this inconvenience an ingenious plan was devised, it is said, by the Banks at Naples, in the 16th century. The Banks instituted a central Chamber, to which each sent a clerk with their claims against their neighbours. These clerks exchanged their respective claims against each other, and paid only the differences in cash.

By this means the different Credits were readjusted among the different customers' accounts, as easily as before; and a large amount of money and bank notes was set free for the purposes of circulation and commerce, and was for all practical purposes equivalent to so much increase of Capital to the Banks and the country.

This system was first adopted in this country by the Banks in Edinburgh. And we have now to show that no permanent extinction of Credit takes place as in Compensation, and that the final result is only a **Transfer** of credit; that is, a *Novation*.

Suppose that a customer of the Commercial Bank has £100 in notes of the Royal Bank paid to him. He is thus Creditor to the Royal Bank. He pays these notes into his account with the Commercial Bank, and thus constitutes the Commercial Bank his agents, to collect the proceeds of the notes and place them to his account.

Suppose that in a similar way a customer of the Royal Bank has £100 in notes of the Commercial Bank paid to him. He is then Creditor to the Commercial Bank. He pays these notes into his account with the Royal Bank, and thus constitutes them his agents, to collect the proceeds from the Commercial Bank and place them to his account.

Each Bank is then Debtor to the customer of the other.

The full way would be for each Bank to send a clerk to the other to collect the notes in money. Each Bank then, having then received payment from the other of its notes, would give Credit to its customer for the amount, and put the money, which would then become its own, into its own till ; just as if the customer had paid in the money himself.

Thus it is evident that there is in each case a *Novation* and not a *Compensation*.

This method of settling the claims of the customers of the two Banks, would require £200 in money.

The same result may be obtained in a much simpler way.

Let the clerks of the two Banks meet.

The clerk of the Commercial Bank, says to the clerk of the Royal Bank : " In consideration of your giving up to me the notes held by your customer, by which I am debtor to him, and so releasing me from my debt to him, I agree to credit my customer with their amount, and to become debtor to him."

This is evidently a *Novation*.

The clerk of the Royal Bank, says to the clerk of the Commercial Bank : " In consideration of your giving up to me the notes held by your customer, by which I am debtor to him, and so releasing me from my debt to him, I agree to give Credit to my customer for their amount, and so become debtor to him."

This evidently is also a *Novation*.

The clerks of the two Banks then exchange notes ; and each having received £100 in its own notes—that is being released from its debt to the customer of the other, which is equivalent to a payment in money—enters the amount to the credit of its own customer.

By this means, each Bank instead of being debtor to the customer of the other, becomes debtor to its own customer ; and the use of £200 in money is saved.

The release of each Bank from its debt to the customer of the other, is the consideration for the creation of the debt to its own customer.

No doubt the £100 of notes of each Bank are withdrawn from circulation and replaced in its own till. But an equal amount of Credit is created, and placed to the credit of each customer ; so that the final result is that the quantity of Credit remains exactly the same.

Thus the debt of each Bank to the customer of the other is extinguished by the new Debt created in favour of its customer.

It is usually said in the Continental Treatises, that the Clearing House is a *Maison de Compensation* or *Liquidation* ; but this is now shown to be an error ; it is not a *Maison de Compensation* but of *Novations*.

A *Compensation* consists of two Acceptations ; but an operation at the Clearing House consists of two *Novations*. And the reason why the operations of the merchants at the Continental fairs were *Compensations*, in which both Credits were extinguished ; and the operations of the Clearing House are two *Novations*, in which new Credits are created, which pay and extinguish the prior ones, but create an equal amount of new credits, so that the final result is that the total amount of Credit remains exactly the same as it was at first, is this—

In the case of the Continental merchants, they were principals ; the tills they held were their own property ; and they were mutually indebted to each other ; when, therefore, they exchanged their mutual debts, they were cancelled and extinguished ; and no new Debts were created to replace them.

But in the case of the Clearing House, the Banks are not principals ; they are only Agents for their customers ; consequently, when they receive their own notes, and so are released from their Debt to the customer of the other, they are bound to create an equal amount of Credit in favour of their own customer, which cancels and extinguishes the preceding Debts, but leaves exactly the same amount of Credit, a Debt, existing.

Hence the Clearing House is a *Maison de Novation*, and not of *Compensation* or *Liquidation*.

The system of clearing was adopted by the City bankers in 1776 ; but the Bank of England was not admitted to it. Nor were the Joint Stock Banks admitted till 1854 ; when the charges of the Joint Stock Banks pressed so heavily on the private bankers that they were obliged to admit them. The Bank of England was not admitted till 1864.

The charges of the London bankers consist of Cheques and

Bills of Exchange, and not Notes; but that makes no difference in the principle of the case. A Cheque or a Bill on a Bank, by a customer who has funds to meet it as his account, is in all respects equivalent to a Note of the banker himself. Each bank collects the Cheques and Bills due to its customers, and re-arranges the Credits due to its various customers exactly in the same way as if they were Notes.

Before 1864, the differences payable by the Banks were settled by Bank Notes; and it is said that about £250,000 were required for that purpose.

But when the Bank of England was admitted in 1864 to the Clearing House, the system of Clearing was still further improved; so that the use of Coin and Notes is now entirely dispensed with.

Every Clearing Bank keeps an account with the Bank of England; and the Inspector of the Clearing House keeps one, too. Printed lists of the Clearing Banks are made out for each Bank, with its own name at the top; and the others are placed in alphabetical order below it. On the left-hand side is the Debtor's column, and on the right-hand side is the Creditor's column. The clerk of the Clearing House then makes up the accounts between each bank, and enters only the difference in the balance sheet, according as it is Creditor or Debtor. A balance is then struck between the Creditor and the Debtor side, and the paper delivered to the clerk, who takes it back to his own bank. The balance is then paid to, or received from, the Clearing House. If the Bank is Debtor, it gives a white ticket to, and if it is Creditor, it receives a green ticket from the Clearing House. By this most ingenious system, not a single Coin or Bank Note is required; and the sums transferred by this means between the different banks amount to about £7,000,000,000 a year at the present time.

But besides the London Clearing House, there is the Country Clearing House; and every large city in the country has a Clearing House of its own. What the aggregate amount of Credits transferred by all the Clearing Houses in the country is, we have no means of knowing.

Neither have we any means of knowing the amount of Coins and Bank Notes saved to the community by the institution of Clearing Houses. But it is something enormous.

COIN.

Almost all nations, even the rudest, have felt the necessity of employing some substance to perform the functions of Money. We have noted elsewhere (**Money**) most of the substances which have been used for this purpose by different nations. A metal, however, of some sort has been found to possess the greatest advantages; and of metals, gold, silver, and copper have been chiefly preferred.

Gold and Silver, however, in a perfectly pure state are too soft to be used for this purpose, and it is necessary to mix some other metal with them to harden them. By a Chemical Law, when two metals are mixed together, the compound is harder than either of them in a pure state.

When Gold and Silver are in the mass they are called **Bullion**. But as the laws of all nations in which Bullion is coined into Money define the quantity of alloy to be mixed with the pure metal, we shall use the word Bullion to mean Gold and Silver in the mass, mixed with such a proportion of alloy as is ordered by law, so as to be fit to be coined.

The purity of Gold is measured by 24th parts, termed Carats; and ever since the 6th Edward VI. (1553), the bullion used for the gold coinage has been 22 carats fine and 2 carats of alloy. This is called **Crown Gold**.

William the Conqueror fixed the standard of Silver Bullion at 11 ozs. 2 dwts. of pure silver, and 18 dwts. of alloy; and except during a short period of confusion from the 34th Henry VIII. to Elizabeth, it has never been departed from. It is called the "old right standard of England," or "Sterling"; and as the Sovereigns of England, though they reduced the weight of the coin, never, with the slight exception just mentioned, debased its purity, Sterling came to signify honest and true—to be depended on.

In France, and those countries which have adopted a decimal coinage, bullion is made of 9 parts of pure metal and 1 part alloy; but it is found in practice that the English proportion gives greater durability to the metal, and is therefore better adapted for a coinage.

Some nations have used simple bullion as Money. But the merchants of these nations were obliged to carry about with them scales and weights, to weigh out the bullion on each occasion. This was usual among the Jews. In some countries it was necessary

both to weigh and assay the bullion at each operation, which was, of course, a great impediment to commerce.

Other nations adopted a more convenient plan. They divided the bullion into pieces of a certain definite weight, and affixed a public stamp on them, to certify to the public that they were of a certain weight and fineness; and they gave them certain names, by which they were commonly known.

These pieces of bullion, issued by public authority, with a stamp on them to certify their weight and fineness, and called by a definite name, and intended to be used in commerce without further examination, are called **Coins**.

When nations discontinued the practice of direct barter, and adopted the precious metals as measures of value, the expedient of cutting the metals into pieces of definite weight and fineness seems so obvious, that we should naturally expect that coining was invented by those nations which first adopted the precious metals as money.

Strange, as it may appear, however, it is certain that this was not the case. Silver and gold were used as measures of value for ages before coining was thought of; and there is every reason to believe that coining was invented, at least in Europe and Western Asia, by a people who up to that time had never used Gold and Silver as Money; and coining was practised by them for centuries before it was adopted by nations who had used the precious metals as Money for ages.

There seems no reason to doubt that coining was invented by the Hindoos long before the age of authentic history. Sir Alexander Cunningham, who is the highest authority on Indian numismatics, is of opinion that the Hindoos coined silver in square coins at least as early as 1000 B.C.; though how much earlier it is not possible to say. However, this plan did not find its way into Western nations.

It has been disputed whether Money, or Coin, was in use in the times of the Homeric poems. Some critics have contended that in certain passages where Homer used the word *βοῦς*, he meant coins of that name, as there certainly were in after ages. But after having gone over the Homeric poems for this express purpose, we are satisfied that there is not the faintest allusion to anything like Money in them.

Not only do we find no allusion to Money in Homer, but the words significative of wealth, give no preference to the precious metals above other things. On the contrary, they are comparatively rarely mentioned. The Homeric words expressive of wealth most

frequently refer to cattle, or horses, or agriculture. Thus we have πολύρρην, πολυβούτης, πολύϊππος, φιλοκτέανος, πολυπάμων, ἄφνειος, πολυκτήμων, πολυλήϊος. In *Iliad* vii. 180, and xi. 46, are almost the only instances in which gold is especially alluded to as wealth—πολυχρύσιοι Μυκήνης. When the Greek and Trojan leaders send spies to discover the plans of the enemy, neither of them promises Money as a reward. Nestor (*Iliad* x. 215) promises the successful spy a black ewe with its young—a matchless gift; and Hector (x. 305) promises on his part a chariot and a pair of horses.

The Homeric poems probably originated when the Achæans were the rulers of Hellas, and before the Dorian conquest, though very probably they may have been edited after that period. In those times, then, we have seen, that there was no Money of any sort in Hellas, nor even were gold and silver used as measures of value. But some time after this, though how long we cannot say, a Money of a curious nature came into use throughout Hellas. They used large iron or copper nails, or skewers, called ὀβελίσκοι, of such a size that six of them made a handful; and when silver was substituted, the δράχμη—the standard silver coin of the Hellenes—derived its name from the fact that it represented the value in silver of a handful of these nails, or skewers. They are mentioned by Plutarch in his life of Lysander, § 17. He says that Lysander sent a quantity of gold and silver money to Sparta by Gylippus, who stole part of it; and this being discovered, made the chief Spartans demand that all the gold and silver should be sent away as a foreign nuisance; and that they should use nothing but their own national coin, which was of iron, and tempered with vinegar, so as to render it useless for any other purpose. And he says—“Probably all the money in former times was of this kind; for they used iron skewers as money, and some used copper ones. Whence it comes that even now a quantity of small coin is called ὀβολος, and a drachma is six oboli, because the hand can grasp that number.” We shall see below that Pheidon, who introduced a silver coinage into Hellas, collected a number of these nails or skewers, and laid them up in the Temple of Here, at Argos, as a curiosity.

Although Julius Pollux says that the invention of coining was by different writers attributed to four different persons, or peoples, the claimants for this honour are practically but two—Pheidon of Argos and the Lydians. The majority of ancient writers attribute it to Pheidon, King of Argos. The historian Ephorus is quoted in two places by Strabo. In viii. 6, he says—

“Εφωρος, ἐν Αἰγίνῃ ἄργυρον πρῶτον κοπήναί φησιν ὑπὸ Φεΐδωνος.

Ἐμπόρειον γὰρ γενέσθαι παρὰ τὴν λυπρότητα τῆς χώρας τῶν ἀνθρώπων θαλλαττουργούντων ἐμπορικῶς."

"Ephorus says that silver was first coined in Ægina by Pheidon. For the island became a commercial port, as the inhabitants were obliged to betake themselves to maritime commerce in consequence of the sterility of the land."

Also in viii. 3—

“Καὶ μέτρα ἐξεῦρε τὰ Φειδώνικα καλούμενα, καὶ σταθμούς, καὶ νόμισμα καχαραγμένον τό τε ἄλλο καὶ τὸ ἄργυρον."

"And he invented the measures called the Pheidonian ones, and weights, and coined Money of silver and other kinds."

The *Etymologicum Magnum* under the title ὀβελίσκος, says—

“Πάντων δὲ πρῶτος Φεῖδων Ἀργεῖος νόμισμα ἔκοψεν ἐν Αἰγίνῃ, καὶ δοῦς τὸ νόμισμα καὶ ἀναλάβων τοὺς ὀβελίσκους, ἀνέθηκε τῇ ἐν Ἀργεὶ Ἡρᾷ."

"And Pheidon of Argos was the first who ever coined Money; which he did at Ægina; and he both put money into circulation, and withdrew the skewers, and laid them up in the temple of Here, in Argos."

In accordance with this, Ælian says—

“Καὶ πρῶτοι νόμισμα ἐκόψαντο καὶ ἐξ αὐτῶν ἐκλήθη νόμισμα Αἰγίναϊον."

"And they were the first who coined Money, which, too, from them is called Æginæan Money."

So the Parian marble says—

“Ἀφ’ οὗ Φ . . . δων ὁ. Ἀργεῖος ἐδήμευσ . . . ε . . . νεσκεύασε, καὶ νόμισμα ἀργυροῦν ἐν Αἰγίνῃ ἐποίησεν."

All these authorities, therefore, agree that Pheidon of Argos, was the first who coined Money, which he did at Ægina; because it was a great commercial port; and therefore it was most wanted there for the convenience of commerce.

The period at which Pheidon lived has been the subject of much dispute. For while some carry it back so far as 865 B.C., others bring it down to 783–744. The question is fully discussed in the first appendix to the first volume of Clinton's *Fasti Hellenici*: and, in his opinion, the latter is the true date. We may, therefore, place the invention of coining in Europe by Pheidon in the first half of the eighth century B.C. At that time he was, by far, the most powerful sovereign in Hellas. Argos was the metropolis, not only of the Peloponnesian Dorians, but of the Asiatic Dorian colonies. The Dorians carried on a very large commerce with the Phenicians,

and Pheidon adopted his system of weights from them. From time immemorial there had been two standard weights used in Assyria—the Babylonian and the Euboic talent. The Dorians traded with the Phenicians, and adopted the Babylonian talent. The Ionians adopted the Euboic talent. As Ægina was the great commercial depôt, this talent was afterwards called the Æginean talent. The Assyrians, at this time, had no coinage. Pheidon, introducing the system of Babylonian weights into Hellas, seems to have invented a system of measures which were called after him, and also a silver coinage, to supersede the clumsy iron and copper skewers and nails then used as Money.

The account of the invention of coining, just given, seems natural and probable. There is, however, a passage in Herodotus, which seems to be at variance with it. He says I., 94, speaking of the Lydians:—“Πρῶτοι δὲ ἀνθρώπων τῶν ἡμεῖς ἴδμεν νόμισμα χρυσοῦ καὶ ἀργύρου κοψάμενοι ἐχρήσαντο.”

“And they were the first men we know of who coined and used gold and silver money.”

This has always been supposed to mean that the Lydians were the first who invented coining, and that they used a double standard, as it is called, of gold coins and silver coins. If this be the case, the authority of Herodotus is against the claim of Pheidon, and, though it is somewhat singular that Julius Pollux does not mention this passage, he says that Xenophanes, of Colophon, assigns the invention to the Lydians.

However, the commentators have not rightly seized the meaning of Herodotus. They make him say that the Lydians coined gold coins and silver coins separately. But when καὶ is used to connect two qualities, it means that the object spoken of partakes of both qualities at once. Thus, as the month began in the middle of the day, the last day of a month was called ἔνη καὶ νέα—the new and old day—because it belonged partly to one month, and partly to another. So there are many other examples. This passage, therefore, does not mean that the Lydians were the first to coin gold money and silver money separately—if Herodotus had meant that he would have said νόμισμα χρυσοῦ τε καὶ ἀργύρου—but it means that the Lydians were the first to coin money of a **mixture of gold and silver**.

This rendering of the passage, which is the genuine Greek idiom, exactly tallies with the fact. The Lydians had a coinage of a mixture of gold and silver, which they called ἤλεκτρον, or *electrum*. They were usually made of three parts of gold and one of silver.

And these coins were adopted throughout the western states of Asia Minor. There are several of these coins in the British Museum.

It may almost seem superfluous to remark that this stamp, or certificate, in no way affects the **Value** of the Coin, or the quantity of things it will exchange for a purchase. Its only object is to save the trouble of weighing and assaying the bullion in commerce. Nor can the **Name** of a Coin in any way affect its **Value**. Values, it is true, are estimated in the number of these pieces of bullion, or Coins: but it is necessarily implied in the bargain that the Coins shall contain a certain quantity of bullion of a definite fineness.

Nevertheless, although this seems so perfectly clear, it is a confusion on this point which is at the root of most of the fallacies and extravagancies on the Currency question, which have so long vexed the public ear. They almost all arise from confounding the **Name**—or **Denomination**—of a Coin with its **Value**: its Name with its Purchasing Power: and, from supposing that, if the Legislature choose to call a Shilling a Pound, that, therefore, a Shilling would have the value of a Pound. Anyone who will brand on his mind the simple principle that, though the stamp gives the Coin currency, it is the weight of bullion alone which gives it Value, will be able to steer his course safely through all the shoals and quicksands of monetary controversies.

It is also evident that if this process of stamping bullion, and so turning it into Coin, is done free of all expense, at the will of anyone who chooses to present bullion at the Mint and demand to have it stamped: and also without any delay: the Value of the metal, as Bullion, must be exactly the same as the Value of the metal as Coin.

If, however, a charge is made for the workmanship; or if any tax is levied on changing the metal from one form into the other; or if delay takes place in doing so; there will be a difference between the Value of the metal as Bullion and as Coin, equal to the charge for workmanship, the tax imposed, and the amount of interest accruing during the period of delay.

These, however, are all fixed, or constant, quantities, which can be ascertained, and they form the limits of the variation of the value of the metal in Bullion and in Coin.

In the assumptions, then, that there is no charge for workmanship, no tax, and no delay in coining—and only upon these assumptions—we have this fundamental Law of the Coinage.

Any Quantity of Metal in the form of Bullion must be exactly of the same Value as the same Quantity of Metal in the form of Coin.

In the case of the Coinage of England, no charge of any sort is made for coining Gold Bullion; but, as considerable delay may take place before anyone who brings Bullion to the Mint can have it coined, the 7 and 8 Vict. (1844) c. 32, s. 4, enacts that everyone may take standard Gold Bullion to the Bank of England, and that the Bank shall be obliged to purchase his Bullion, in Notes, to the amount of £3 17s. 9d. for every ounce of such Bullion. And, as the holder of such Notes, may immediately demand legal Coin for them at the rate of £3 17s. 10½d. per ounce, it may be said that every person can immediately convert his Bullion into Coin, at the charge of 1½d. per ounce.

COMPENSATION; or, SET OFF.

ἀντεξέτασις: ἀντέλλογος: ἀντελόγιμος: συμψηφισμός.

If two persons are mutually indebted to the same amount and at the same time, each may claim that the Debt which he has against the other shall be taken in payment of the Debt he owes. Each Debt is, therefore, Legal Tender, or Money, with respect to the other, and neither party can demand specie from the other.

This is termed **Compensatio**. Thus Modestinus says (*Dig.* 16, 2, 1)—“*Compensatio est Debiti et Crediti inter se contributio.*”

Basilica 24, 10, 1—“ἀντεξέτασις ἐστὶν χρέους καὶ δανείσματος ἀντέλλογος.”

Compensation is the mutual Set Off of Debts and Credits.

If the Debts are equal, each is payment for the other; they are weighed and Set Off against each other.

If the Debts are unequal, equal amounts compensate each other, and the balance only is due in money.

Simple as this may appear, it took a long time, both in Roman and English Law, to arrive at it.

In early Roman Law, Compensation was not allowed as a matter of right, each party had to bring his action against the other.

Afterwards, in the time of Gaius (*Inst.* iv. 61-68), Compensation was not held to be payment, but the Prætor, or Equity Judge, allowed the counter debt to be pleaded as a defence to the action of debt.

But the absurdity of this at last became apparent. Pomponius

says—"Ideo Compensatio est necessaria quia interest nostra potius non solvere quam solutum repetere."

Therefore Compensation is necessary, because it is our interest rather not to pay, than to recover back what we have paid.

Marcus Aurelius allowed Compensation as a matter of right, and thus mutual Debts became Money, or Legal Tender, with respect to each other.

So it was enacted (*Cod.* 4, 31, 4, 14)—"Si constat pecuniam inviam deberi, ipso jure pro soluto compensationem haberi oportet."

If the mutual debts are proved, Compensation is to be held as payment as a matter of right.

So also—"Compensationes debitorum ipso jure fient."

Basil. 24, 10, 21 — "οἱ τῶν χρεῶν συμψηφισμοὶ ἰδίῳ δικαίῳ γίνονται."

Now Compensation of Debts is a legal right.

Bankers had, however, always been obliged to allow Compensation for counter claims.

The rule of the Common Law of England was the same as the early law of Rome. If two persons were mutually indebted, each had to bring his action against the other.

Equity, however, which adopted the law of the Pandects and the Basilica, always allowed Compensation or Set Off.

In many cases the rule of Common Law worked great injustice. If a person and a bankrupt were mutually indebted, the person was obliged to pay his debt in full, and only received a dividend on his own from the bankrupt's estate. To remedy this, the Act (Statute 4 Anne, c. 17) allowed set-off in cases of bankruptcy, and this was extended by Statutes 2 Geo. ii. c. 22, s. 12, and 8 Geo. ii. c. 24, § 4.

But, by the Supreme Court of Judicature Act, 36 and 37 Vict. (1873), c. 66, which enacts that, in all cases in which the rules of Equity conflict with those of the Common Law, the rules of Equity shall prevail, Compensation is allowed in all cases. Hence, if two persons are mutually indebted in equal amounts, due and payable at the same time, each Debt is Money, or Legal Tender, for the other.

Both debts must have actually accrued due at the time, to be subjects of Compensation.

Ulpian says (*Dig.* 16, 2, 17)—"Quod in diem debetur non compensabitur antequam dies venit."

Basil. 26, 10, 7 — "τὸ ὑπὸ ἡμέραν πρὸ τῆς ἡμέρας οὐ συμψηφίζεται"

A Debt which is not due cannot be compensated.

As for instance, if a banker holds a customer's acceptance not yet

due, he cannot retain a balance on his customer's account to meet it, because his customer's debt does not come into existence until the bill becomes due.

So if a banker holds a merchant's acceptance not yet due, and if the merchant holds Notes of the banker, the banker must pay his Notes on demand, and cannot set off the merchant's acceptance, because the merchant's debt has not yet come into existence.

So, for a similar reason, if two merchants hold each other's acceptances, one of which is due, and the other not yet due, they cannot be compensated.

If a Debt, which was not yet due, was set against a Debt which had become due, it was termed *Deductio* (Gaius, *Inst.* iv. 57).

The following are examples of Compensation—

1. Suppose that two bankers issue Notes, and each has got possession of £100 in the Notes of the other. Each tenders the other his own Notes in payment of his own Debt.

Each banker is two *personæ*; he is Creditor, and has a Right of action (+ £100) against the other; and each is Debtor, or has the Duty to pay (− £100) his own Notes to the other.

So long as each banker holds the Notes of the other, there are, of course, £200 of Rights of Action, Credits, or Debts, in existence.

But when they exchange Notes, each tenders to the other the Debt he has against him, in payment of the Debt due to him; that is Compensation.

Each banker still continues to be two *personæ*; but instead of each being Debtor to the other, each is now Debtor to himself.

It is a case of double *Confusio*. Each Debt is now extinguished by *Confusio*. Each obligation is now extinguished, and the £200 cease to exist as Economic Quantities.

2. Suppose that a banker holds a merchant's acceptance for £100, which has become due; suppose that the merchant holds £100 of the banker's Notes, or has an account with him. When the banker demands payment of his acceptance from the merchant, the merchant tenders him his own Notes in payment; or the banker simply writes off the amount of his acceptance from the merchant's account; and as before, both Obligations are extinguished by *Confusio*.

3. Suppose that two merchants have issued equal acceptances, each due on the same day. Suppose also that the acceptance of each merchant comes into the possession of the other. On the day of payment, each merchant tenders to the other his own

acceptance in payment of the acceptance due to him ; this, as before, is a double *Confusio* ; and both Obligations are extinguished.

This form of Compensation was formerly very extensively used on the Continent, before bankers discounted mercantile bills.

At numerous centres of commerce, Lyons, Antwerp, Nuremberg, Hamburg, and many others, there were held great fairs, every three months.

The merchants, instead of making their bills payable at their own houses, where they must have kept large sums in cash to meet them, made them payable only at these fairs. In the meantime their bills circulated all over the country, performing the part of money, and got covered with indorsements.

On a certain day of the fair the merchants met together, and presented their acceptances to each other ; and if their respective claims were equal, they were balanced and paid by being exchanged against each other, by Compensation. By this means an immense commerce was carried on and liquidated without any specie at all. Boisguillebert, one of the morning stars of modern Economics, says that at the fair of Lyons, transactions to the amount of 80,000,000 (livres?) were Settled without the use of a single coin.

CONFUSIO—MERGER.

μῖξις

When a person has issued a Right of Action against himself, and it comes again in any way into his own possession, so that he has both the Right to demand and the Duty to pay himself, it is termed **Confusio**, or *Concursus Debiti et Crediti* in Roman Law ; *μῖξις*, in Greek Law ; and **Merger** in ours.

It was universally agreed that *Confusio*, or *Concursus Debiti et Crediti*, or *μῖξις*, of a simple Debt extinguished the Obligation ; but how it does so has given rise to much subtle speculation, and for centuries puzzled Jurists and Divines. It was a problem in Mercantile Jurisprudence exactly similar to the doctrine in Algebra that $- \times -$ gives $+$, which was for centuries acknowledged as an empirical dogma, but of which the scientific explanation has only been fully given in very recent times. The Divines alleged, that a Right once created cannot be destroyed ; and the Jurists said, that the Right being transferred to the Debtor, he could not sue himself ; and, therefore, that the Obligation was extinguished.

This explanation, however, is not satisfactory ; because there are cases in which a man may sue himself ; he may fulfil two characters, or *personæ* ; and as one *persona*, or character, he may sue himself as another *persona*.

Moreover, this would only show that the Right is suspended, or in abeyance, and not that it is actually extinguished ; and some eminent Jurists seem to take this view (*Stair's Institutes of the Law of Scotland*, book i. tit. 18, § 9).

Moreover, in several cases, a *Confusio*, or *Concursus Debiti et Crediti* occurs, in which the Right and the Duty unite in the same person and are not extinguished, but may afterwards be separated. (*Stair, ut supra* ; *Erskine's Institutes of the Law of Scotland*, book iii. tit. 4, § 23 ; *Bell's Dictionary of the Law of Scotland*, art. *Confusio*.)

The following considerations, however, will give a satisfactory solution of this juridical puzzle.

When one person is a Creditor, and another is a Debtor, they are two characters or *personæ*.

If then the Right of Action comes into the possession of the Debtor, he now fulfils two characters, or *personæ*. The two *personæ* exist, though they are now united in one individual ; just the same as they did when in separate individuals. And these two *personæ* may deal with one another exactly in the same way as when they were separate individuals. They may agree to extinguish the Obligation by either of the three methods by which Obligations are extinguished (**Acceptilation**). The Obligation then is not suspended, or in abeyance ; it is absolutely extinguished and annihilated.

Thus this perplexity, which was held by Jurists for centuries to be insoluble, is now removed.

CONSUMPTION.

Consumption in Economics is the correlative term to Production.

The Producer is the person who offers a product for sale in commerce ; the Consumer is the person who purchases it for his own use and enjoyment, and takes it out of Commerce.

Hence **Production** and **Consumption** constitute **Exchange**.

A great deal of misconception has been introduced into Economics in recent times, by the unfortunate fact that the English word Consumption represents two French words, *Consumption* and *Consonnation*.

Now *Consumption* comes from *Consumer*, which necessarily means destruction. But *Consommation* comes from *Consommer*, which means to finish, to accomplish, to complete, and in no way involves destruction.

Now *Consommation* is the technical term in French Economics for Consumption, and what we have to do is to determine the meaning of *Consommation* in French.

The Economists termed the person who brought a product into the market and offered it for sale, the *Producteur*; and the person who purchased it for use and enjoyment, and took it out of commerce, the *Consommateur*, or the *Acheteur-Consommateur*, the Buyer-Consumer.

Consommation is derived from *Consommer*, which comes from the Latin *Consummare*, to *complete*, to *accomplish*.

Thus La Fontaine says—"En peu de jours il *consomma* l'affaire."
—"In a few days he *completed* the transaction."

So Pascal says—"On va chercher et *consommer* la démonstration."
—"We must now seek for and *complete* the proof."

So Dupuis says—"Durant laquelle se *consomme* le grand ouvrage."
—"During which the great work is *completed*."

Another writer says—"Le sacrifice d'Isaac, qui ne fut point *consommé*, fut l'image de celui qui fut *consommé* sur la croix."
—"The sacrifice of Isaac which was not *completed*, was the type of the one which was *completed* on the Cross."

We need not multiply instances, as every French scholar knows well enough that the genuine sense of *consommer* is to Complete, to Accomplish.

And this was the meaning universally given to *Consommation* by the early French Economists.

Thus Le Trosne says—"There is this difference between an exchange and a sale, that in an exchange everything is *completed* (*consommé*) for each party; they have the thing which they wished to procure, and have only to enjoy it. In a sale, on the contrary, it is only the buyer who has gained his object, because it is only he who is able to enjoy. But all is not finished (*terminé*) for the seller."

Also—"Exchange arrives directly at its object, which is completion (*consommation*); there are only two terms, and it is finished (*se termine*) in one contract. But a contract in which Money intervenes is not completed (*consommé*), because the seller must become a buyer, either by himself, or by the interposition of him to whom he transfers his money. There are, therefore, to arrive at

completion (*consommation*), which is the final object, at least four terms and three contractors, of whom one intervenes twice."

So Blanqui says—"Toutes les transactions devaient se *consommer* par forme d'échange."—"All business must be *completed* in the form of an exchange."

So Cournot says—"Où se *consomment* les achats et les ventes."—"Where sales and purchases are completed."

Michelet says—"Il ne *consomme* rien, ne finit rien."—"He *completes* nothing, *finishes* nothing."

Consommation, or Consumption, then, in the language of the early French Economists, simply meant the *completion* of an Exchange. Suppose, for example, that a painter and a sculptor agree to exchange a picture and a statue. When the painter has received the statue and the sculptor has received the picture, each has Produced, *i.e.*, offered in exchange his own work, and has **Consummated** his desire by obtaining the object he wished to enjoy. And the Exchange is **Consummated**, or **Completed**, because each has obtained a **Satisfaction**. Hence was effected what the early Economists called a complete Exchange. But there was no idea of Destruction in this reciprocal Consummation of desires.

The *Consommateur*, or *Consumer*, then, was the person who Consummated, Completed, or Accomplished the desire of the Producer. The Producer brings forward something and offers it for sale: but it is the Purchaser who gives Value to it: it is he who crowns the work, and Consummates the desire of the Producer: or completes the transaction by purchasing the product by giving something in exchange for it: which is its value. The consumer, therefore, meant nothing but the Purchaser, or Customer.

Thus *Consommation* was used by the early French Economists to mean simply **Demand**.

Thus Boisguillebert, the morning star of modern Economics, says—" *Consommation* (*Demand*) is the principle of all Wealth."

"All the revenues, all the riches in the world, both of a prince and his subjects, only consist in **Demand** (*consommation*): all the most exquisite fruits of the earth and the most precious products would be nothing but rubbish if they were not **Demanded** (*Consommés*)."

The word Consumption as hitherto used in Economics, is a complex term, for while production was used to mean obtaining a product and bringing it into commerce, Consumption, or *Consommation* as the French word is, was used by the Physiocrats to

mean purchasing a product, taking it out of commerce, and using or enjoying it. And as a considerable part of Economical products were the fruits of the earth, which are destroyed in their use and enjoyment, this secondary and accidental sense of destruction came to be considered as the primary one.

Smith uses the words "consume," "consumption," and "consumable goods," but, as usual, gives no definition of what he means by them. The introduction to the *Wealth of Nations* opens thus—"The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually *consumes*, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations.

"According, therefore, as this produce, or what is purchased with it, bears a greater or smaller proportion to the number of those who are to *consume* it, the nation will be better or worse supplied with all the necessaries and conveniences for which it has occasion."

In Book ii., ch. 1, he says that when a man possesses sufficient stock to maintain him for months, or years, he "naturally endeavours to derive a revenue from the greater part of it, reserving only so much for his immediate *consumption* as may maintain him till this revenue begins to come in."

He also says in the same chapter that as floating capital is to be classed "money, by means of which all the other three are circulated and *distributed* to their proper *consumers*."

In chapter ii. of the same Book he says—"Though the weekly or yearly revenue of all the different inhabitants of every country in the same manner may be, and in reality frequently is, paid to them in money; their real riches, however, the real weekly or yearly revenue of all of them taken together, must always be great or small in proportion to the quantity of *consumable goods* which they can all of them purchase with this money. The whole revenue of all of them taken together is evidently not equal to both the money and the *consumable goods*, but only to one or other of these two values, and to the latter more properly than to the former.

"Though we frequently, therefore, express a person's revenue by the metal pieces which are annually paid to him, it is because the amount of these pieces regulates the extent of his power of *purchasing*, or the value of the goods which he can annually afford to *consume*. We still consider his revenue as consisting in this power of *purchasing* or *consuming*, and not in the pieces which convey it."

And further on in the same chapter, after showing that the use of

money is to circulate, and *distribute* these consumable goods to their proper owners, speaking of a banker's notes, he says that—"The same exchanges may be made, the same quantity of *consumable goods* may be circulated and *distributed* to their proper *consumers* by means of his promissory notes to the value of £100,000, as by an equal value of gold and silver."

In Book IV. ch. viii., he says—"Consumption is the sole end and purpose of all Production; and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer. The maxim is so perfectly self-evident, that it would be absurd to attempt to prove it. But in the mercantile system, the interest of the consumer is almost constantly sacrificed to that of the producer; and it seems to consider production, and not consumption, as the ultimate end and object of all industry and commerce." And in a great number of other passages, which we need not quote, Smith evidently means the purchaser by the word consumer.

J. B. Say says¹—"The reader must understand that as Production is not the creation of matter, but the *creation of utility*, so consumption is not the destruction of matter, but the *destruction of utility*. The utility of a thing once destroyed, the first foundation of its value, which made it sought for, which establishes the *demand* for it, is destroyed. Thenceforth it has no value; it is not a portion of wealth.

"Hence, to *consume* (*consommer*), to *destroy the value of things*, to *annihilate their value*, are expressions whose meaning is absolutely the same, and corresponds to that of the words *produce*, *give utility*, *create value*, whose meaning is also the same.

"All consumption, being the destruction of value, is not measured by the volume, the number, or the weight of the products consumed, but by their value," and so on.

Again he says²—

"CONSOMMATEUR: Is he who destroys the value of a product, either to produce another, or to satisfy his tastes or wants.

"CONSOMMATION: CONSOMMER: to consume (*consommer*) is to destroy the value of a thing, or a portion of its value, by destroying the utility which it had, or a portion of that utility.

"We cannot consume (*consommer*) that which cannot be destroyed. Thus we can consume the service of an industry, and not the industrial faculty which has rendered this service: the service of land, but not the land itself.

¹ *Traité*, div. iii. ch. i.

² Epitome at the end of the *Traité*.

"A value cannot be consumed twice; for to say that a thing is consumed is to say that it does not exist any more.

"Everything which is produced is consumed; therefore every value created is destroyed, and was only created to be destroyed."

Again he says¹—"The most immediate effect of every kind of consumption (*consommation*) is the loss of value, and therefore of wealth, which follows for the possessor of the product consumed (*consommé*). This effect is constant, inevitable, and we must never lose sight of it in reasoning on these matters. A product consumed (*consommé*) is a value lost for all the world and for ever."

And this meaning of consumption as destruction has been widely adopted by writers. Thus Malthus says²—"Consumption; the destruction, wholly or in part, of any portions of wealth"; and "Consumption is the great purpose and end of all production."

So McCulloch says—"By consumption is meant the annihilation of those qualities which render commodities useful or desirable. To consume the products of art and industry is to deprive the matter of which they consist of utility, and consequently of the exchangeable value communicated to it by labour. Consumption is, in fact, the end and object of human exertion; and when a commodity is in a fit state to be used, if its consumption be deferred, a loss is incurred."³

To this, Senior has well answered⁴—"That almost all that is produced is destroyed, is true; but we cannot admit that it is produced for the purpose of being destroyed. It is produced for the purpose of being made use of. Its destruction is an incident to its use, not only not intended, but as far as possible avoided. In fact, there are some things which seem unsusceptible of destruction, except by accidental injury. A statue in a gallery, or a medal, or a gem in a cabinet, may be preserved for centuries without apparent deterioration. There are others, such as food and fuel, which perish in the very act of using them; and hence as these are the most essential commodities, the word consumption has been applied universally as expressing the making use of anything. But the bulk of commodities are destroyed by those numerous gradual agents which we call collectively *time*, and the action of which we strive to retard. If it be true that consumption is the object of all production, the inhabitant of a house must be termed its consumer, but it would be strange to call him its destroyer;

¹ *Traité*, bk. iii. ch. ii.

² *Definitions on Political Economy*, p. 247.

³ *Principles of Political Economy*, p. 511.

⁴ *Political Economy*, p. 54.

since it would unquestionably be destroyed much sooner if uninhabited. It would be an improvement in the language of Political Economy if the expression 'to use' could be substituted for that 'to consume.'" At p. 14, Senior observes that "Demand is sometimes used as synonymous with consumption."

In fact, it is astonishing that men of ability should maintain such a monstrous paradox as that everything which is produced is destroyed; that it is only produced for the purpose of being destroyed; and that if it is not destroyed, a loss is incurred.

An architect builds a splendid Palace. He, the builders, and the workmen, are, in the language of Economists, *Producers*; the palace is a *product*; are palaces produced for the purpose of being destroyed; and is a loss incurred if they are not destroyed immediately they are produced?

An artist *produces* a great picture. Does he produce it for the purpose of destroying it? And is loss incurred if it is not destroyed as soon as produced?

A sculptor *produces* a great statue. Does he produce it for the purpose of its being destroyed? And is a loss incurred if it is not broken in pieces immediately that it is produced?

J. B. Say says¹—"The English succeed in making very fine glass for mirrors, and could supply them at a very moderate price, if the enormous duties laid on the manufacture of glass in England did not raise the product to a price which many consumers (*consommateurs*) cannot afford."

Now did the Consumers of the mirrors smash them? Were the mirrors produced for the purpose of being smashed? And was a loss incurred if they were not smashed immediately they were produced?

It is said in *Gil Blas*, B. iv. c. 6—"A book in great esteem among the students, who have already consumed (*consommé*) four editions of it." Now did the students buy these four editions for the purpose of destroying them?

Johnson, explaining the elementary principles of trade to Dr. Wetherell, Master of University College, Oxford, says²—"Here are three profits to be paid between the printer and the reader, or in the style of commerce, between the manufacturer and the *consumer*; and if any of these profits be too penuriously *distributed* the process of commerce is interrupted."

Now do the consumers or readers of books purposely destroy

¹ *Cours*, part iii. ch. 3.

² BOSWELL, *sub anno* 1776, vol. ii. p. 414, edit. 1822.

them? Are books produced for the purpose of being destroyed? And is a loss incurred if they are not destroyed?

There are vast quantities of furniture produced which seem absolutely indestructible except by violence, if properly protected. The Scythian war chariot, the unique glory of the Florentine Museum, seems to be made of wood which has attained the solidity of iron, and shews that wood may be as durable as marble. Now carpenters produce massive bookshelves and massive tables. Are these bookshelves and tables produced for the purpose of being destroyed? And is a loss incurred if they are not destroyed? So far from their being destroyed, there seems to be absolutely no limit to their durability. The Scythian war chariot is contemporary with Abraham, and it is as fresh as the day it was made.

We need not multiply any more instances, as multitudes will occur to any one who thinks on the subject for an instant. But it clearly appears that if Consumption means destruction, the doctrine that consumption is the end of all production is manifestly false; and to say that a loss is incurred if things are not destroyed as soon as they are produced, is an absurdity so great that we can only marvel how men of ability could put such a thing into their books.

In fact, this doctrine is only another example of that careless and hasty generalisation which has caused so much mischief in Economics. It is true that *some* things, such as food and fuel, are produced for the purpose of being destroyed: destruction is essential to their use. But there are many other things of which destruction is only incidental to their use, such as clothes and many other things; and also a vast number of things do gradually waste away in the course of time, such as houses, watches, and innumerable other things; but, so far from being purposely destroyed, the greatest care is taken to preserve them and to keep them in repair; and there are multitudes of other things which are absolutely indestructible except by violence.

But, even though it be said that the majority of things do wear away in the course of time, Economics has nothing to do with their destruction. As Economics has nothing to do with the various processes by which products are obtained; but a product only enters into Economics when it enters into commerce; so when it is purchased and passes out of commerce it passes out of Economics; and Economics has nothing to do with the mode in which products are used or destroyed. The Economic phenomenon is nothing but the exchange.

In the language of commerce the Consumer means simply the

buyer. When Say speaks of the Consumers (*consommateurs*) of the mirrors, he means merely the buyers of them. He himself says¹—“The Consumers (*consommateurs*) of products are their buyers.” When it is said in *Gil Blas* that four editions of the book were consumed, it only means that they were bought. When Dr. Johnson speaks also of the Consumer, he means only the buyer. In the language of Commerce, Producer and Consumer mean only seller and buyer; Production and Consumption together constitute exchange, which is the true field and limit of Economics, and it is by divagating from the true limits of the science that Economists have caused all the confusion. Bastiat well says²—“In general we devote ourselves to a trade, a profession, or a career; and it is not from that that we expect directly the object of our satisfaction. We render and we receive services; we offer and we demand values; we make purchases and sales; we labour for others, and others labour for us: in a word we are *Producers* and *Consumers*.”

By using the terms Production and Consumption in their true and strict commercial sense we are enabled to get rid of the term Distribution. The Physiocrats used commerce and exchange to mean the whole passage of a product from its first seller (*producteur*) through a series of exchanges to its last purchaser (*acheteur-consommateur*); the intermediate exchanges were denominated *traffic*. But as a matter of fact, each of these transactions is a separate and independent exchange, and an Economic phenomenon. The farmer grows the corn, and *produces* it, *i.e.* offers it for sale in the market. It then enters Commerce and Economics. The miller buys it from the farmer; he is the customer or consumer. That is one exchange, or Economic phenomenon. The miller grinds the corn, and *produces*, or offers it for sale to the baker, who is the customer, or purchaser, or consumer of the flour. That is another exchange, or Economic phenomenon. The baker bakes the flour into bread, and *produces*, or offers the bread for sale in his shop, and the public come and buy the bread in his shop. They are the buyers, customers, or consumers of the bread. That is a third exchange, or Economic phenomenon. Then the bread passes out of commerce and Economics, into use and enjoyment. Now here is a separate series of exchanges; each wholly independent of the others; each an Economic phenomenon; and all governed by the same great general law. And of course an analogous course of reasoning applies to

¹ *Traité*, p. 349.

² *Harmonies Economiques*. Art. “Producteur Consommateur,” p. 360.

all products. Thus the term Distribution is absorbed in Production and Consumption.

Sometimes, however, Distribution is used in the same sense as Consumption. Thus, Turgot entitles his work *Réflexions sur la Formation et Distribution des Richesses*.¹ So Smith says²—"The causes of this improvement in the productive powers of labour, and the order according to which its produce is naturally *distributed* among the different ranks and conditions of men in the society make the subject of the First Book of this Inquiry." Senior defines³ Political Economy to be the Nature, Production, and Distribution of Wealth. Now by Distribution these writers mean consumption, or purchase. Smith says³—"The metal pieces of which it (money) is composed, in the course of their annual circulation *distribute* to every man the revenue which properly belongs to him." And a little further on he says—"The same exchanges may be made, the same quantity of *consumable goods* may be circulated and *distributed* to their proper *consumers*" by paper as by money. When Economists spoke of Distribution they invariably meant Distribution by means of an exchange. For how is wealth distributed? By no other method than that of exchange. If a man wants to have bread distributed to him, he must have something to give in exchange for it, such as shoes or other things. And if a man wants shoes distributed to him he must have something such as bread to give in exchange for them. Hence the shoemaker and the baker are each producers, and the reciprocal distribution, or consumption of each other's produce is an exchange. Hence we see that the *Production, Distribution, and Consumption of Wealth*, the *Production and Distribution of Wealth*, and the *Production and Consumption of Wealth* are identical expressions, and absolutely equivalent to *Exchange*.

We therefore eliminate all ideas of destruction from the technical conception of Consumption in Economics, and leave only purchase as the true general meaning. We have seen that it is entirely erroneous to assert that everything is produced for the purpose of being destroyed: and that if Consumption means destruction, it is not true to say that Consumption is the end of all Production. Still less true is it to say that if Consumption be deferred, a loss is incurred. But when we see that Consumption is merely purchase, then it is true to say that Consumption is the end of all Production, because Production means offering something in exchange, and

¹ Introduction to *Wealth of Nations*.

² *Political Economy*; introduction.

³ *Wealth of Nations*, bk. ii. chap. ii.

Consumption means taking it in exchange. So also it is true that the quicker Consumption is, the more profit there is, and the slower Consumption takes place, the less profit there is. We have shown, under *Rate of Profit*, that a profit made in a day is seven times a greater Rate of Profit than a Profit made in a week, and, of course, the longer it is deferred, the less it becomes. So if his product is not consumed, or purchased at all, it is a total loss to the producer, and he has lost the reward of his labour, as it is only consumption which constitutes his product wealth, and his labour is not consummated, or completed, until he has got a reward for it. A shoemaker does not want a thousand pairs of shoes; what he wants is something in exchange for them—bread, clothes, fuel, house room, etc., either directly, or the means of obtaining these things, which is money; and unless his shoes are consumed, or bought, he can get no satisfaction for his labour, which is thrown away, and not completed. So a baker does not want a thousand loaves of bread, but like the shoemaker, he wants the other necessities, conveniences, and enjoyments of life, which he can get in exchange for them. So a wine merchant does not want his hogsheads of port and claret, or his butts of sherry: a cloth merchant does not want his miles of cloth: a farmer does not want his acres of corn, or his herds of cattle: a coalowner does not want his shiploads of coal: but each and all of them want the other necessities and conveniences and amusements of life which they can get in exchange for them. A company of actors do not perform a play, nor a troupe of opera dancers execute a ballet, for their own delectation, but for what they can get in exchange for it; and their labour is productive just as it does or does not bring in returns. So no producer wants the things which he himself produces, but only what he can get in exchange for them, and the faster he can gain things in exchange for his products the faster he increases in wealth. Hence we see that in this sense, which was the one given to it by those who originated it, it is true that Consumption is the end of all Production; and that the faster the consumption takes place the greater is the increase in opulence. And as Production and Consumption constitute exchange, it is rapidity of exchange which leads to national opulence.

A country which abounds with gold and silver coin cannot properly be said to be wealthy; any more than one which abounds with machinery. So long as these stand idle, the country must remain poor, like a manufacturing town in a strike. It is their motion or circulation which generates wealth, and the rapidity of

that circulation which indicates the rate of increase or progress. This consideration will enable us to solve a question which was long agitated by Economists and statesmen. Which employment conduces most to national opulence? From the time of Colbert to the French Revolution, the question whether the towns or the country most conduced to national wealth was keenly disputed, and according as one side or the other prevailed, the one was encouraged and cockered, and the other depressed. Now, as the velocity of the circulation indicates the rate of progress, whatever employment causes currency to circulate with the greatest rapidity, most augments national opulence. Currency is the engine of circulation, and industry is its motive power; whichever species of industry drives the engine fastest, most rapidly augments the national wealth. Now it is well known that of all species of industry, agriculture causes the most languid circulation of the currency. By offering an extra stimulus of reward, the productions of human industry can be multiplied and quickened to an extraordinary extent, but the process of Nature is slow, and cannot be accelerated at command. Different trading pursuits cause a brisker circulation in different degrees—all much faster than agriculture. Hence a purely agricultural country must increase slower in opulence than any other, and other countries very much in the proportion of their inhabitants engaged in agriculture, as compared to other pursuits. Experience amply verifies this remark. Poland and other countries, which have few resources but agriculture, are the poorest and most barbarous in Europe. Great Britain and Holland, in which the smallest proportion of the inhabitants are engaged in raising food for the rest, are the wealthiest, and other countries very much in similar proportions. The instances are not many in which people have made fortunes by agriculture, but there is scarcely probably a small country town, where some industrious and energetic individuals have not realized a competence by trading.

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COST OF PRODUCTION.

We have defined Production to be the act of placing any product in the market where it is offered for sale (**Production**). Hence Cost of Production must mean the Cost of placing any product in the market where it is offered for sale.

But Ricardo insisted that the expected Profit to be made by selling the article, must be included under the Cost of Production. This, however, is obviously inadmissible. The Cost of Production is the cost of placing the article in the market; its Value is the amount it realizes in the market, and the Profit is the difference between the Cost of Production and its Value. Ricardo excluded from consideration in his treatise all commodities except those which were capable of being produced in unlimited quantities by human labour; and then he contended that Cost of Production regulates Value. But he also maintained that the Quantity of Labour expended in obtaining a product is its Value, and consequently he made Quantity of Labour and Cost of Production identical. This doctrine, obtained from the consideration of only one small class of Economic Quantities, has exercised a most baleful influence on English Economics, and now requires a thorough investigation.

1. It has been shown in the first part of this work that the ruin of a very large part of English Economics is owing to the undue prominence which is given to Labour as the Cause of, and as necessary to, Value. Smith begins by putting Labour in the forefront of his work as necessary to Value, for reasons which we explained in the first part of this work; although he has completely contradicted that doctrine in a subsequent part of it.

In Book I., ch. v., Smith has thrown the whole subject of Value into the utmost confusion, by suddenly changing his notion of the Value of a thing from being the Quantity of Labour, or Commodities, it will purchase or exchange for, to the Quantity of Labour embodied, as it were, in its production. Hence the unfortunate and misleading expression, **Intrinsic Value**, has become firmly established in Economics, which is not only most manifestly self-contradictory, but it has greatly obscured the comprehension of the whole subject, and especially the Theory of Credit.

Ricardo perceived Smith's inconsistency, and censured him for it; but he has fallen into exactly the same contradiction himself, because he begins his work by defining the Value of a thing to be

the thing it will exchange for; and as he goes on in his book he changes the idea of the Value of a thing to be the Quantity of Labour embodied in it.

From this unfortunate idea not only has the term **Intrinsic Value** become firmly established, but also the equally unfortunate idea of an **Invariable Standard of Value**. Smith and Ricardo imagined that if any commodity could always be produced with the same Quantity of Labour, it would be an Invariable Standard of Value.

Ricardo says: "If the Quantity of Labour realised in commodities regulate their exchangeable Value, every increase in the Quantity of Labour must augment the value of that commodity on which it is exercised, as every diminution must lower it."

Ricardo calls the Quantity of Labour required to produce a commodity its **Absolute Value**, and says that if any commodity could always be produced with the same Quantity of Labour it would be an Invariable Standard of Value.

He says: "The Labour of a million of men in manufactures will always produce the same Value."

Therefore, according to Ricardo, whether a commodity sells for £10, for £50, or for £100, it is of exactly the same Value!

Ricardo, however, constantly uses another expression as identical with **Quantity of Labour**, namely, **Cost of Production**.

It is, however, quite erroneous to use **Quantity of Labour** and **Cost of Production** as identical expressions, because nothing is more common than for wages to rise or fall, while Quantity of Labour remains exactly the same. Now Wages are certainly part of the Cost of Production, hence Cost of Production constantly varies, while Quantity of Labour remains exactly the same.

2. Even supposing, however, that Quantity of Labour and Cost of Production remained the same, it is quite easy to show by numerous examples that it is quite erroneous to say that they regulate Value.

(1) It is quite common in a coal mine to have different strata of coal of different qualities. Some strata at the top may be of excellent quality; others lower down may be of very indifferent quality, mixed with shale and other rubbish; now the coals obtained from the inferior strata may require a greater amount of Labour or Cost to obtain them than the superior coals. But will they bring the same price in the market? Common sense and experience show that they will not; but that the better qualities of coal will sell for a higher price than the worse qualities, no matter what the Cost of Production or Quantity of Labour may be.

(2) Take the case of an orchard. The trees are of course cultivated with the same amount of Labour or Cost. Consequently each individual fruit must be the result of exactly the same Quantity of Labour or Cost of Production. Yet everyone knows that out of the very same orchard, and off the very same tree, fruit of very different qualities will be gathered. Will these different qualities of fruit bring the same price in the same market? Common sense and experience show that they will not: but that the superior qualities of fruit will bring a higher price than the inferior qualities, quite irrespective of Cost of Production or Quantity of Labour.

As an example of this, it is usual in the coffee plantations in the East Indies to separate the berries into three sizes: the larger, the middling, and the smaller: it is found that the value of the whole crop is much increased by this separation of the berries: while the three sizes sell for very different prices. Now as each heap is produced by exactly the same Quantity of Labour or Cost of Production, it is evident that it is a manifest fallacy to assert that Value is regulated by quantity of Labour or Cost of Production.

(3) Take the case of an ox or a sheep. Every part of these animals is the result of the same Cost of Production: and therefore every part of the same animal ought to bring the same price in the same market. But is this the fact? Common sense and experience show that they do not: but that different parts of the same animal bring very different prices.

(4) It is quite common for a street of houses to be built in a new neighbourhood: and when first built they let for a moderate price: but as population and fashion increase in the neighbourhood, the rents of the houses, long after they are built, and are, perhaps in a much inferior condition, will be much higher than they were when the houses were new.

(5) All fruits of the earth are greatly affected by the qualities of the soil they are grown in. There are few which are more sensitive to the qualities of the soil and the influence of the weather than the vine. The slightest difference in the qualities of the soil, exposure to the sun or wind, produces the most marked differences in the qualities of the wine, and on its price. It is impossible to select an example to show more clearly the fallacy of the doctrine that Cost of Production or Quantity of Labour regulates Value than the culture of the vine.

Ricardo was so *entêté* of the doctrine that all Value is due to human Labour, that he maintained that the sun and air and

fine weather and moisture have no effect on the Value of the crops. He says—"But these natural agents, though they add greatly to *Value in use*, never add Exchangeable Value, of which M. Say is speaking, to a commodity. . . . But as they perform their work gratuitously, as nothing is paid for the use of air, of heat, and of water, the assistance which they afford us adds nothing to Value in Exchange."

The glaring absurdity of this doctrine, so contrary to the plainest common sense, is sufficient to condemn the whole of Ricardo's system. In reply to this we may simply quote a paragraph from a daily paper of June 3rd, 1880:—"The longed-for rains have come at last, and though the showers as yet have been gentle and rather local, the half inch of moisture which has refreshed the fields during the last seventy hours has been *worth at least a million sterling*. Every gallon of water which the thirsty soil has drunk up might be appraised at a tangible money value, for it has brought back life to the parched pastures."

If Ricardo's doctrine were true, that sun and air and water have no effect on the value of the crops, it would equally follow that bad weather, storms, and other calamities would have no effect in diminishing their value.

In fact, if Ricardo's doctrine were true, the Value of the crop ought not to be more than the Labour expended upon ploughing and preparing the ground and sowing the corn: because human labour ends there: all the growth and increase is the agency of Nature.

The direct consequence of Ricardo's doctrine that Labour is the cause of all value is that the growth of corn, and fruits, and of flocks and herds, is due to human labour, a consequence which was broadly asserted by some of his disciples.

The Expression Quantity of Labour is unintelligible.

3. When Smith and Ricardo say that Value depends upon Quantity of Labour, the expression at first sight seems somewhat plausible, and has had many adherents; but the slightest reflection shows that it is absolutely unintelligible. For when things of different kinds are produced by different kinds of Labour, how is it possible to compare Quantities of different kinds of Labour?

Labour is the generic name for the exertion of **Thought** or Abilities of any sort; and there are of course as many different

kinds of Labour as there are different species of Thought ; and these are quite incommensurable with each other, and can by no possibility be compared with each other.

How can the Labour of a ploughman, a carpenter, or a bricklayer be compared with the Labour of a Newton, a Raphael, or a Shakespeare? How can we compare the "Quantity of Labour" in the *Principia* with the "Quantity of Labour" in the *San Sisto*, *Macbeth*, or the *Messiah*? How are we to compare the "Quantity of Labour" in the *Comedy* of Dante with the "Quantity of Labour" in one of Giotto's frescoes, or Ghiberti's doors of the Baptistery of Florence? How are we to compare the "Quantity of Labour" in a Bethell conducting a great law case, with the "Quantity of Labour" in a surgical operation by Paget or Fergusson? How can we compare the Quantity of Labour in a watch with the Quantity of Labour in ploughing a field or steering a ship?

The fact is, that immediately we begin to endeavour to compare different kinds of Quantities of Labour together the attempt is so hopeless that it must be abandoned.

Absurdity of the Doctrine that all Values are Proportional to Quantities of Labour.

4. The doctrine that Value is due to Quantity of Labour adopted by Ricardo, as applied only to certain commodities, was carried to an extreme by De Quincey, a fervent admirer of Ricardo's, in some dialogues on Political Economy.

One of the interlocutors asks if there is any one principle in Political Economy from which all the rest may be derived.

The other replies that there is: such a principle exists in the doctrine of Value; that the ground of the Value of all things lies in the Quantity of Labour which produces them. Here is that great principle which is the cornerstone of all tenable Political Economy; which granted or denied, all Political Economy stands or falls. . . . Mr. Ricardo's doctrine is that A and B are to each other in Value, as the Quantity of Labour which produces A to the Quantity which produces B; or, to express it in the very shortest formula by substituting the term *base* as synonymous with *producing labour*; all things are to each other in Value as their bases are in Quantity.

"I affirm that when the labourer obtains a large quantity of corn, for instance, it is far from being any fair inference that wages are then at a high real value; that in all probability they are at a

very low real value ; and inversely I affirm that when wages are at their very highest real value, the labourer will obtain the very smallest quantity of corn. . . . But what is it that I assert? Why, that there is no connection at all of any kind, direct or inverse, between the quantity commanded and the value commanding. . . . I should again be introducing the notion of a connection between the quantity obtained and the value obtaining, which it is the purpose of my whole argument to exterminate. For my thesis is that no such connection subsists between the two as warrants any inference that the real value is great, because the quantity it buys is great or small, because the quantity it buys is small ; or reciprocally, that, because the real value is great or small, therefore the quantities bought shall be great or small."

"Wages are at a high real value when it requires much labour to produce wages, and at a low real value when it requires little labour to produce wages ; and it is perfectly consistent with high real value that the labourer should be almost starving ; and perfectly consistent with low real value—that the labourer should be living in great ease and comfort. . . . Meantime I presume that in your use and in everybody's use of the word value, a high value ought to purchase a high value, and that it will be very absurd if it should not. But as to purchasing a great *Quantity*, that condition is surely not included in any man's idea of value."

We have quoted this long extract in order to show the utter confusion in the word Value which Smith, Ricardo, and their followers have introduced into the science. The Value of a thing is any other thing it will purchase : and of course the greater the Quantity of that thing which it can purchase, the greater is its Value. But by considering the value of a thing to be the Quantity of Labour bestowed in getting it, the absurd conclusion necessarily follows that the more labour is given and the smaller the result, the more valuable the thing is. That is, according to De Quincey, a man's labour is much more valuable when he gets £10 in wages than when he gets £100 !

5. We will now show the absurd consequences of the doctrine that all Values are proportional to the Quantity of Labour bestowed on producing them.

It has been said that Macaulay received £20,000 for the copyright of his *History of England*. Now, 200 very fine oak trees would sell for £20,000 on the ground : also 1,000 cattle would sell for £20,000 : also 10,000 sheep would sell for the same. Therefore, according to this doctrine, the Quantity of Labour in Macaulay

writing his History was equal to the Quantity of Labour in 200 oak trees growing: equal to the Quantity of Labour in 1,000 cattle growing: equal to the Quantity of Labour in 10,000 sheep growing!

A piece of ground on which a town is built sells for £10,000: also a Bank Credit may be of the value of £10,000: consequently the Quantity of Labour in the piece of ground is equal to the Quantity of Labour in the Bank Credit.

A girl's head of hair sold, as we have seen, for £5: therefore the Quantity of Labour in the growth of the girl's hair is equal to the Quantity of Labour in about two and a half sheep.

Such are the doctrines of Political Economy which are still current in this country!

We have already seen that there is no labour at all in more than about 20 per cent. of things which have Value.

But all these perplexities and absurdities vanish at once when we clearly perceive that Demand is the sole cause of Value.

Error of the doctrine that Cost of Production regulates Value.

6. It has already been shown that it is a profound error to suppose that Cost of Production regulates Value: and in practical Economics it often happens that Value regulates Cost of Production: *i.e.* Wages are regulated and adjusted by the Value of the commodity.

(1) In the trial of W. Frend it is said—"But I believe it to be a notorious fact that, in proportion to the fluctuating Value of the manufactured commodity, the price of spinning a certain quantity of wool has varied in different degrees downwards from one shilling, which may be considered as the maximum."

(2) So it was said by a landowner in the East of England—"Wages in the East of England during the present century—from 1800 to 1870—were always regulated by the price of wheat flour."

(3) So an Essex farmer says—"It is a very old custom in the East, South, and I believe in the West of England, to pay farm labourers in proportion to the current price of wheat. When wheat becomes dear the farmers, quite unsolicited, have been in the habit of raising the wages of their men, and *vice versâ*."

(4) So in the iron trade it has long been the custom to regulate wages by the price of iron: and in speaking of a conference to adjust differences between the Lanarkshire ironmasters and their men, a sliding scale was agreed to that when the price of iron was 60s. per ton the men should be paid 5s. per ton: and that a

variation of 1s. per ton, either up or down, should mean a rise or fall of 1d. per ton in wages.

(5) So it was said in a daily paper—"One of the most general movements in the coal trade is the adoption of the sliding scale method of determining wages by the price of the Product of the Labour. In nearly every one of the coal-producing districts there have been adoptions of this principle: in some cases at isolated collieries, and in others covering large associations. The principle is not new in the trade; for it is well known that for two years before the strike in Durham last year, a sliding scale arrangement had been in force in that county, and in an allied industry—the iron trade—there had been an adoption of the principle for two periods under the auspices of the Board of Arbitration for the manufacturing iron trade of the North of England. And in much earlier years it is stated that in the lead mining industry a somewhat similar method of determining wages was known. In the manufacturing iron trade there are special facilities for gathering these data, which are the best basis for such scales—figures showing the relationship between prices and wages for years. In one of the great centres of that trade the relationship has become in years so definite as to approach to the dignity of a rule: and the old standard of 'shillings to pounds' is one well known. That is, for every pound in the price of certain classes of iron the puddler should receive for his part of the labour in producing that iron 1s. per ton. With this generally acceptable rule, it was easy to define a scale of advances suited to the special circumstances of the trade in a given district."

(6) So in the years 1872 and 1873 the price of coal rose enormously, to the dismay of every householder in the country. During this period also repeated rises took place in the wages of the colliers. The public are never very nice in observing the order of such events, and many persons thought that the long-propheesied failure of our coal supplies had come; and that the increased price of coal was due to the increased cost of obtaining it. The complaints of the public were so loud that a Committee of the House of Commons was appointed to investigate the subject. They instituted a searching inquiry into the whole facts of the case, and they clearly shewed that the enormous rise in the price of coal was due to the immense demand for iron, every ton of pig iron requiring three tons of coal, and every ton of rolled iron requiring six tons of coal. The Committee said that they were satisfied that the prices of coal which prevailed several years before the present rise commenced were so low that they did not afford a reasonable profit to

the owners of collieries in general, nor such remuneration as the workmen might, with regard to the hazardous nature of their labour, reasonably expect.

The witnesses examined by the Committee were unanimous that it was the high price of coal that caused the workmen to demand higher wages, and not the reverse. Mr. Baker said—"The iron trade has, generally speaking, owing to its large consumption, ruled the price of coal and wages too." Mr. Wardell said—"Wages have advanced in proportion to the price of coal." Mr. Dickinson said that—"Coal has been selling at an unprecedentedly high price of late, and the consequence has been that wages have been similarly high." Mr. Macdonald said—"In every case in Scotland the rise in the price of coal preceded the rise in the rate of wages. The workmen followed the employers' demand upon the public with a demand for an advance of wages. The advance of price was announced in the papers, and always preceded the demand of the men. In one case, where the men were satisfied that the rise in the price of coal was injurious to the manufacturing interests of the country, they agreed not to press their demand for wages if the employers would take off the last advance of price." Mr. Halliday described the successive rises in the price of coal, which were followed by a rise in wages. He said that the custom from his youth upwards had been that the men should have a rise of 2d. for every 10d. rise in the price of coal; which custom had, however, not been strictly followed in the late rise. In 1869 wages were 3s. 6d. to 3s. 9d. a day. In 1871 they got an advance of 2d. per ton in consequence of the rise in coal. In November 1871, coal advanced 10d., and the men got 1d. In January 1872, coal rose 10d., and the men got 1d. In May coal rose another 10d., and the men got nothing. In June coal rose 1s. 3d., and the men got 2d. In July coal rose 2s. 6d., and the men got 3d. In September coal rose 5s., and the men got 3d. In December coal rose 3s. 4d., and the men got 2d.

The Report says—"It is clearly shown that the *real order of events has been the rise in the price of iron, the rise in the price of coal, and the rise in the rate of wages*. The increased payment per ton for labour employed in getting the coal cannot therefore be considered as the primary cause of the large increase in the price of coal; a rise in wages followed upon rather than preceded a rise in the price of coal."

The same system has found favour among our antipodean fellow-citizens. It is said in the *Times*, July 31st, 1874—"In view of the difficulties that surround the labour question at home, I think it

desirable to call attention to one mode of settling affairs of this sort adopted by the coal-miners at Newcastle, to the north of Sydney. A demonstration signalling the settlement was held lately. The chairman of the miners' association took the opportunity to announce the terms of agreement accepted by the miners and managers, which were as follows—"First, that the minimum rate of wages payable for hewing and all other work usually performed by miners at each of the above-mentioned collieries shall be the rates current thereat prior to July 23rd, 1872, when the selling price of second or best coal was 8s. per ton, and of small coal 3s. 6d. per ton. Second, that, subject to the above limit, the wages payable at each of the above collieries for hewing and all other work usually performed by the miners shall be *regulated by the price of coal, and rise and fall with it*. . . . On concluding the above, the chairman announced to coal buyers in Victoria, South Australia, New Zealand, Hong Kong, Batavia, and India that no hindrance in future would exist through strikes to the supply of ships—the commercial millennium of the port had arrived; strikes and lock-outs were a thing of the past. Various miners addressed the meeting in the same happy and reassuring strain."

These instances are sufficient to prove the truth of the principle which we have been endeavouring to enforce, that it is just as often the Price of an article which governs its Cost of Production as the reverse.

Cases in which Cost of Production appears to Regulate Value.

7. There are, however, undoubtedly some cases in which Value appears to follow, or to conform to, Cost of Production; and therefore hasty reasoners might say that Cost of Production **Regulates** Value.

But we have now to determine in a scientific point of view whether this is really so, or whether it is only *apparently* so; whether the same phenomena cannot be accounted for or explained by a much wider Theory. And if so, the general principles of Natural Philosophy compel us to adopt the General Theory and reject the Special one, which only accounts for *one* class of cases.

Ricardo says—"It is the Cost of Production which must ultimately regulate the Price of Commodities, and *not*, as has been often said, the proportion between the Supply and the Demand; the proportion between Supply and Demand may indeed for a time affect the market Value of a Commodity, *until it is supplied*

in greater or less abundance, according as the Demand may be increased or diminished; but this effect will only be of temporary duration. . . .

“The opinion that the Price of commodities depends solely on the proportion of Supply to Demand, or Demand to Supply, has become almost an axiom in Political Economy, and has been a source of much error in that science.”

He then quotes the doctrine of Say that Supply and Demand regulate Prices at all times, but that Cost of Production is a Limit below which they cannot remain any length of time, because Production would then be entirely stopped or diminished, and Lord Lauderdale’s Law, which we have given in a previous chapter, and says—

“This is true of monopolised commodities, and indeed of the market Price of all other commodities *for a limited period*. If the Demand for hats should be doubled, the Price would immediately rise, but the rise would only be temporary: unless the Cost of Production of hats, or their natural price, were raised. If the natural Price of bread should fall 50 per cent., from some great discovery in the science of agriculture, the Demand would not greatly increase, neither would the Supply: for a commodity is not supplied merely because it can be produced, but because there is a **Demand** for it. Here, then, we have a case where the Supply and Demand have scarcely varied; or if they have increased, they have increased in the same proportion: and yet the price of bread will have fallen 50 per cent., at a time, too, when the Value of Money had continued invariable.

“Commodities which are monopolised either by an individual or by a company vary according to the law which Lord Lauderdale has laid down: *but they fall in proportion as sellers augment their Quantity*, and rise in proportion to the eagerness of the buyers to purchase them: their Price has no necessary connection with their natural Value. But the Prices of Commodities *which are subject to competition*, and whose Quantity may be increased in any moderate degree, will ultimately depend, *not on the state of Demand and Supply*, but *on the increased or diminished Cost of their Production*.”

Mill agrees in this doctrine. He says that there is a Law *different* from Supply and Demand, which regulates the permanent or average Values of the class of commodities we are considering. And, in agreement with Ricardo, he says—

“It is therefore strictly correct to say that the Value of things

which can be increased in Quantity at pleasure does not depend (except accidentally and during the time necessary for Production to adjust itself) upon Demand and Supply: on the contrary, Demand and Supply depend upon it."

"To recapitulate: Demand and Supply govern the Value of things which cannot be indefinitely increased: except that even for them, when produced by industry, there is a minimum Value determined by Cost of Production. But in all things which admit of indefinite multiplication, Demand and Supply only determine the perturbations of Value, during a period which cannot exceed the length of time necessary for altering the Supply."

The student will observe Mill's reasoning. He says that the Value at any *particular* time is the result of Supply and Demand: the plain meaning of which is that the Value at *all* times is the result of Supply and Demand. And then he goes on to search for a Law *other* than Demand and Supply which regulates their permanent Value! That is to say, their permanent Value is regulated by a different Law from that which regulates it at *all* times!

8. Malthus, who was a good mathematician, naturally felt that Ricardo's method of reasoning was inadmissible. He says—

"It has been shown that no change can take place in the market prices of commodities, without some previous change in the relation of the Demand to the Supply; and the question is, whether the same position is true in reference to natural prices? This question must, of course, be determined by attending carefully to the nature of the change which an alteration in the Cost of Production occasions in the state of the Demand and the Supply, and particularly to the specific and immediate cause by which the *change of Price* which takes place is effected.

"We all allow that when the Cost of Production diminishes, a fall of Price is almost universally the consequence; but what is it specifically which forces down the price of the commodity? It has been shown in the preceding section that it is an actual or contingent excess of Supply.

"We all allow that when the Cost of Production increases, the prices of commodities rise. But what is it specifically which forces up the price? It has been shown that it is an actual or contingent failure of Supply. Remove these actual or contingent variations of the Supply; that is, let the extent of the Supply remain exactly the same, without excess or failure, whether the Cost of Production rises or falls; and there is *not the slightest ground for supposing that any Variation of Price would take place.*

“If, for instance, all the commodities which are produced in this country, whether agricultural or manufactured, could be produced during the next ten years without Labour, but could only be supplied exactly in the same quantities as they would be in the actual state of things; then, supposing the wills and means of the purchasers to remain the same, there cannot be a doubt that all prices would also remain the same. But if this be allowed, it follows that the relation of the Supply to the Demand is the dominant principle in determination of prices, whether market or natural, and that the Cost of Production can do nothing but in subordination to it, that is merely as it affects the ordinary relation which the Supply bears to the Demand.

“It is, however, not necessary to resort to imaginary cases in order to fortify this conclusion. Actual experience shows the principle in the clearest light.

“In the well-known instance noticed by Adam Smith, of the insufficient pay of curates, notwithstanding all the efforts of the legislature to raise it, a striking proof is afforded that the permanent price of an article is determined by the Demand and Supply, and not by the Cost of Production. The real cost of the education would in this case be more likely to be increased than diminished by the subscription of benefactors; but a large part of it being paid by benefactors, and not by the individuals themselves, it does not regulate and limit the Supply; and this Supply, on account of such encouragement, becoming and continuing abundant, the price is naturally low, whatever may be the real cost of the education given.

“The effects of the poor-rates in lowering the wages of independent labour present another practical instance of the same kind. It is not probable that public money should be more economically managed than the income of individuals; consequently the cost of rearing a family cannot be supposed to be diminished by parish assistance; but a part of the expenses being borne by the public, and applied more largely to labourers with families than to single men, a fair and independent price of labour adequate to the maintenance of a certain family, is no longer a necessary condition of a sufficient supply. As by means of parish rates so applied this Supply can be obtained without such wages, the real costs of supplying labour no longer regulate the ordinary wages of independent labour.

“In fact, in every kind of bounty upon production, the same effects must necessarily take place; and just in proportion that such bounties tend to lower prices, they show that prices depend upon

the Supply compared with the Demand, and not upon the Cost of Production."

9. Having now presented to our readers the opinions of these various writers, we shall endeavour to discover some principles which may decide the controversy which is at the basis of the whole theory of Economical Dynamics.

The doctrine, then, whose soundness we are going to investigate is this, that there are two classes of cases of value, in the first of which *Cost of Production regulates Value*, in the other the *Cost of Producing the last quantity raised regulates the Value of the whole*.

Now, before we investigate the truth of these laws, we shall lay down certain fundamental principles, drawn from the whole analogy of Physical Science :—

I. There cannot be more than One Grand General Theory of Value.

II. That if two, or more, Theories of Value will apparently account for any class of phenomena of Value, or Changes of Value, that Theory only is to be held as the true one which accounts for ALL the phenomena in the Science, and not that single class of phenomena only.

Hence it is quite clear that, if in any particular class of phenomena we have several theories which will apparently account for them, we have, in order to discover which is the true law, only to suppose a change in the relation of the quantities; and then that theory only which holds good for the altered relation of the quantities, and accounts for the change, is the true Law, and all others must be rejected.

This is in exact conformity with the 3rd Aphorism of the *Novum Organum*, book 1—"Quod in *contemplatione* instar causæ est, id in *operatione* instar regulæ est."—"That which in *Theory* is the *Cause*, in *Practice* is the *Rule*."

The result derived from these principles is this, that the Law according to which Changes of Value take place, is the Law of Value at all particular times.

Now, as soon as these indubitable principles are laid down, the day is lost for Ricardo and his followers; because Ricardo himself admits that the law of *Supply and Demand* governs the market price of all commodities for a limited period. And Mill says that the Law of *Supply and Demand* only governs *perturbations* of value.

Now this concedes the whole question. Because the law which governs the Perturbations, or Changes, of Value, can be the only true law of Value in all particular cases.

There are several cases where "Quantity of Labour" and "Cost of Production" may be considered as equivalent, and the same argument will apply to show that neither *regulates* value. But take it as we may, either Quantity of Labour or money Cost of Production, we shall show that the doctrine that Cost of Production regulates Value is entirely false; because, if this doctrine be true, it must necessarily mean:—

1st. That all things which are produced by an equal Quantity of Labour or an equal money Cost, must be equal in Value, independently of any other consideration.

2ndly. It must also mean that all changes in Value must be due to changes in Cost of Production, and to nothing else.

3rdly. And if different things produced by equal Quantities of Labour must be equal in Value, still more rigorously, if possible, must it follow that all parts of the same thing, when once produced, must be equal in Value.

But we have already given a number of examples to show the entire fallacy of such a doctrine.

10. Ricardo says in the passage already quoted—"That if the Demand for hats should be doubled, the price would immediately rise; but that rise would only be temporary unless the Cost of Production of hats, or their natural price, were raised." But if the hats rose from the increased Demand, why should they fall again without the Supply being increased? If they are to fall again, why should they have risen? If Cost of Production, Supply, and Demand remain exactly the same after they have risen, how can any Change in their Value take place? Ricardo has omitted to state, what he meant, no doubt, that upon the rise of prices from the increased Demand, a larger Supply would be produced, which would again reduce hats to their former Value. But the omission of this is the whole essence of the question. Because it was the increased Demand which raised them, and it would only be the increased Supply which would lower them. Thus showing that it is entirely through the operation of Demand and Supply that all changes in value take place.

Ricardo's doctrine that when prices are very high or very low they are governed by the Law of Demand and Supply, but that at some intermediate point they are governed by the Law of Cost of Production, is utterly contrary to the *Law of Continuity*, which says that *A Quantity cannot pass from one amount to another by any change of conditions without passing through all the intermediate magnitudes according to the intermediate conditions*. If, therefore,

the Law of Demand and Supply be true at any one point in the range of prices, it must be true at *all* points.

11. Mill has on this, as in so many other cases, emitted doctrines which are contradictory. Thus he says—"For this reason, and from the erroneous notion that Value depends on the *proportion* between the Demand and the Supply, many persons suppose that this proportion must be altered whenever there is any Change in the Value of the commodity; that the Value cannot fall through a diminution of the Cost of Production, unless the Supply is permanently increased; nor rise, unless the Supply is permanently diminished. But this is not the fact."

But afterwards he says—"It is simply the Law of Demand and Supply, which is acknowledged to be applicable to all commodities, and which in the case of money, as of most other things, is *controlled, but not set aside*, by the Law of Cost of Production, *since cost of production would have no effect on value, if it could have none on Supply.*"

So also, in speaking of another class of cases, he says—"Since Cost of Production here fails us, we must revert to a law of Value *anterior* to Cost of Production, *and more fundamental*, the Law of Demand and Supply."

Again, in speaking of the law governing International Values, he says—"We have seen that it is not their Cost of Production. . . . We must accordingly, as we have done before in a similar embarrassment, fall back upon *an antecedent law*, that of Supply and Demand, and in this we shall again find the solution of our difficulty."

Now these extracts exhibit the utterly unscientific character of Mill's system, which is contrary to the fundamental principles of Natural Philosophy. It is no more to be tolerated that different classes of Economic phenomena should be governed by different fundamental Laws of Value, than that different classes of Astronomical phenomena should be governed by fundamentally different theories; or that different classes of Optical phenomena should be explained on different theories of Light. When the analyst seeks for the Equation to a curve, he manifestly assumes that the Law which is true at any *one* point must be true at *all* points. For, if not, how can there be a *general* Equation to the curve? If different classes of Economical phenomena have different fundamental theories, how can there be any General Equation in Economics? How can it be a Physical Science? Now, as it is universally admitted to be a demonstrated truth that a great *many* cases of Value are governed by the Law of Demand and Supply, it follows

that *all* cases *must* be so ; and the distinctions which have been made are contrary to the principles of Inductive Philosophy, and must be swept away.

12. Wages are part of Cost of Production, and Smith says that high wages *cause* high prices. We have shown that this is a complete error, and that it is just as often that Wages, *i.e.* Cost of Production, are governed by the Value of the product as the reverse.

In a great number of cases it is impossible to say what the Cost of Production of any article is, and the very fact of a market being opened up for it is the very thing that confers Value on it. In the last century, eggs were at 1d. a dozen in the Highlands of Scotland, and salmon was so abundant that it had scarcely any saleable value at all, there being no communication with the Southern markets. When this communication was opened, eggs rose to 4d. or 6d. a dozen, and salmon acquired a Value of about 1s. a pound. That was because agents from the South came and bought up the produce ; because eggs were, perhaps, 1s. 6d. a dozen in the London markets, and salmon was 2s. 6d. a pound. Now, eggs were not 1s. a dozen in London because they were 4d. a dozen in the Highlands, but people gave 4d. a dozen for them in the Highlands because they could get 1s. a dozen for them in London. What, then, becomes of the Ricardian rule, that Cost of Production *regulates* Value? In this case it was the Value of the eggs in the London market that regulated their Value in the Highlands, and not the reverse, and the same is obviously true of all other species of produce.

13. The universal law in Economics is, therefore, that THE RELATION BETWEEN DEMAND AND SUPPLY IS THE SOLE REGULATOR OF VALUE. This law, like the law of gravity, holds good in all cases whatever. It not only governs the Value of any article, but also governs the Value of every separate item of which that article is composed. All circumstances whatever that influence Value can be shown to do solely through their effect in altering the relation of Supply and Demand.

Price, then, is a perpetual struggle between the buyer and the seller, and the circumstances which compel one party to yield, are the only measure of Value at the time of the purchase. To say that the Cost of Production regulates price is only true in this sense, that no man would willingly sell any articles he has produced at a less price than that, together with something additional, by way of reward for his own labour, and he could not continue to do so

for any length of time. But, having settled that in his own mind as the lowest limit, he always endeavours to get as much more as he can, without the smallest reference to the Cost of Production. On the other hand, the purchaser cares nothing for the Cost of Production ; his only object is to buy as cheap as he can, and he takes no thought whether the seller is selling at a loss or not. The result of this will be that if the selling Value of any article falls below its Cost of Production for a length of time, it will cease to be produced. Every man endeavours to produce as cheap as he can, and to sell as dear as he can, and the two operations are quite independent of each other.

When we say that the Relation between Supply and Demand is the sole Regulator of Value, we mean to say that *a Change of Value depends solely upon a Change in that relation, and upon nothing else.* No change in the Cost of Production will make any change in Value, unless it is also accompanied by a change in the relation of Demand and Supply, and it is only through and by means of causing such an alteration that a change in the Cost of Production is usually accompanied by a change in Value.

In order to illustrate this, let us take a few examples ; let us take any article, such as stockings, and let us suppose that at any given time they bear a certain price in the market, no matter what, and that there is a certain demand for them at that price.

Let us suppose that, at a certain time before the introduction of machinery, a manufacturer employed 1,000 hands ; let us also suppose that he at some time invents a piece of machinery by which he can produce the same quantity of stockings, but at the same expense as 50 men would be. Now, if he only produces the same Quantity as before, as he will of course take the best price he can get for them, the Demand remaining the same, it is quite evident that no alteration in price will ensue, and all the profit accruing from this diminution in the Cost of Production will go into the pocket of the producer ; consequently, if he does not manufacture any additional quantity, no alteration in the market price will follow : everything will go on as before ; the only difference will be that that particular manufacturer will make enormous profits, owing to his sagacity and skill in inventing this machinery. But if the materials for making the stockings can be supplied in unlimited quantities, the manufacturer will naturally wish to increase the Quantity he produces, and realise greater profits ; but if he produce a greater quantity than before, that increased quantity will not be sold, unless offered at a diminished price, so as to increase the circle of buyers ;

but as the Cost of their Production has been diminished to him, he can afford to sell at a diminished price ; and the more he wishes to sell, the more must the price be reduced. Now, it is quite evident that the increased quantity of this single manufacture thrown upon the market, and offered at a diminished price, will affect the prices of the whole quantity in the market, because everyone else must consent to sell at the same price to effect a sale at all. It is also clear that every single manufacturer must accommodate his price to the market price, and if he cannot produce at the market price he will have to cease producing ; and as we may suppose that there are several degrees of skilfulness and economy among the various manufacturers, it is quite evident that at every successive diminution of the market price, those in succession will have to cease working who are least able to produce cheaply. Hence, it is quite clear that it is the market price which regulates the quantity of expense that can be afforded in producing, and that it is the quantity that can be produced at the least expense, compared to the whole quantity that can be sold, that regulates the market price.

Again, let us observe what is the result of a diminution of the cost of production, according to various circumstances. The Northern counties of Scotland export corn and cattle to the Southern markets. They were served by a Steam Company, which had a monopoly of the trade. The usual consequences of a monopoly followed. Those which concern us here, as a question of Economics, were, that the freights and fares were most extravagant, and all petitions for reduction were unheeded, as the Company thought there was no danger of opposition. However, the people of the North could stand it no longer, and they determined to provide steamboats of their own. The natural consequence immediately followed, freights and fares were reduced nearly one-half. Almost all the farmers subscribed for shares in the steamer, and many of them said that if they lost all the money sunk in the steamer, they would still be great gainers by the saving of freights. That is, the diminution in the Cost of Production (*i.e.*, the expense of placing their produce in the Southern markets) went into their pockets. And why was this? Because the additional quantity of corn, etc., thrown by the Northern districts upon the Southern markets was a mere drop in the bucket compared to the demand of the Southern markets, and had no appreciable effect in lowering prices there ; consequently, all the profits arising from the saving of freight, and the diminution of the Cost of Production, went into the pockets of the Northern farmers and landlords.

14. These considerations are sufficient to show the fallacy of the doctrine, that it is the Cost of Production which **Regulates** Price, or Value. On the contrary, it is generally the Value an article is expected to have, when produced, that causes it to be produced. The difference between the Cost of its Production and its Value is called the *profit*, and the course of a prudent man would be, first to calculate the Cost of Production of the article, then to consider what would be its probable Value when produced; and if the difference between the two, or the profit, is sufficient to make it worth his while to produce it, he will do so; if not, he should try to discover some more profitable operation. If the Value of the article when produced is only equal to, or less than, the Cost of Production, he must sell at a loss, and repeated operations of this nature will end by ruining him. The history of all commerce is but too full of examples of the Value of articles falling below the Cost of Production, and of mercantile enterprises which never pay their expenses. There is but one way by which a producer can govern price by the Cost of Production, and that is when he can obtain a command over the Supply, and limit it artificially, and not produce more than the public can be made to buy at a particular price. The Dutch acted upon this principle when they conquered the Spice Islands in the Eastern Archipelago. With contemptible selfishness, they cut down three-fourths of the spice-bearing trees, and so artificially enhanced the Value of the remainder. It is also said that there is but one mine in England which produces plumbago, or black lead for pencils, and this being in the hands of one proprietor, he carefully limits its annual produce to force up its price in the market.

15. It is necessary to observe that when we say that a change in price invariably depends upon a change in the relation of Supply and Demand, we by no means assert that the change in price is directly proportional to a change in that relation, so that, for instance, an addition of one-fourth of the quantity would produce a reduction of one-fourth in price. It is well known that this proportion does not hold; and that a different proportion is found to obtain among different articles. Nor, though attempts have been made in some instances, such as corn, to discover the relation that exists between the two, does it appear that any satisfactory solution has been obtained. All that can be said is that it is a change in the one that produces a change in the other, without asserting that there is any fixed proportion between the two changes, because it may very well be, and we believe it to

be the case, that that proportion follows no fixed law, but varies according to time and circumstances.

It is perfectly manifest that any diminution of the Cost of Production, through however large an extent of country it might cover, would have no effect whatever in altering the market price, until the extra quantity thrown upon the market bore an appreciable proportion to the previous supply. And if districts of country are excluded from markets, either by want of communication or by prohibitive laws, then, when there are markets opened to them, their produce will acquire an immensely increased value to what it had before. That is, the opening of the markets will immensely increase the Value of the produce in the country, and the increased quantity of produce thrown upon the market will tend to lower the Value of the produce in that market; and these two Values will approach to each other in the inverse proportion of the respective quantities, precisely as the space travelled through by each of the two bodies under the influence of gravity is in the inverse proportion of their masses. The establishment of steam navigation enormously increased the Value of produce in the north of Scotland; the repeal of the corn laws enormously increased the Value of produce in the Danubian principalities.

Rules connecting Cost of Production and Value.

16. A consideration of the preceding examples will furnish us with the following Rules regarding the relation between Cost of Production and Value :

1. *No change in Cost of Production will cause a change in Value unless it is accompanied by a change in the relation of Supply and Demand.*

2. *A Diminution in the Cost of Production, when effected without an Increase of the Quantity produced, goes entirely to the benefit of the Producer.*

3. *A Diminution in the Cost of Production, in cases where the Quantity of the Product can be increased without limit, goes entirely to the benefit of the Consumer.*

4. *A Diminution in the Cost of Production, in cases where the Quantity can be Increased, but not without limit, goes partly to the benefit of the Producer, and partly to the benefit of the Consumer; and the benefit is divided between the two in the inverse ratio of the extra Quantity added compared to the previously existing Supply.*

Fundamental Error of Smith and Ricardo.

17. The systems of Smith and Ricardo, although there may appear to be a difference between them, are nevertheless identical in their fundamental error. For they both look to the wrong person as conferring Value on a product. They both look to the Labour of the Producer as conferring Value; whereas it is unquestionably certain that the **Demand** of the Consumer is the sole origin and cause of Value. Smith says that it is the Labour which the Producer bestows upon an article which gives its Value; whereas it is perfectly certain that things have not Value because Labour has been bestowed in producing them; but much Labour is bestowed in producing them because people desire to have them very much, and are willing to give a great price to possess them; and therefore they have great Value. But, as Condillac observed long ago, things have not great Value, because much Cost of Production has been bestowed on them; but great Cost of Production is bestowed on them because they have great Value when produced. Buyers do not give high prices because sellers have spent much money in producing; but sellers spend much in producing because they hope to find buyers who will give more.

It is quite true that the natural effects of competition will in many cases cause the price to approach very nearly to Cost of Production: and Ricardo's law will apparently be found to be true. But this is one of those cases which must be sedulously guarded against in science, viz., to give in a careless form of adherence to a form of expression which is radically erroneous because it appears to account for phenomena.

Formerly philosophers thought that the motion of projected bodies had a natural tendency to decay. They saw that the motion of a projected body always gradually diminished and finally ceased. It was quite easy to calculate results upon this principle. Given a certain velocity of projection, it was quite easy to calculate when the motion would cease, upon the supposition that it naturally decayed. And the results would have agreed with the calculations. What could be more satisfactory? If, then, it is hastily assumed that because results may agree with calculations, the principles of these calculations are therefore necessarily true, these opinions might have held their ground. But it is well known that modern philosophers have entirely rejected the notion that motion has a

natural tendency to decay. But they arrive at the same result by a different process of reasoning. They say that motion has no natural tendency to decay: but that in all the cases we see there are counteracting causes at work, such as the resistance of the air, friction, etc., which oppose it and finally destroy it. And they unanimously reject the former method of accounting for the results, and adopt the latter. Hence we see that, though principles are manifestly erroneous which do not account for results, yet it does not necessarily follow that any principle which does account for results is therefore necessarily true, because it may in fact happen that several different principles may account for the result; and it requires judgment to decide which is the true one. Now the Ricardian principle of Value is just like the former of those of motion. It apparently accounts for results in some cases; and therefore it may impose upon an unwary thinker, but it wholly fails to do so in all others. But it is a dangerous and seducing error, utterly false in principle, and has been the cause of multitudes of calamities, and it is to be repudiated and rejected by all those who study Economics in the true spirit of science.

CREDIT (*see also* DEBT).

Credit, in the popular sense, is the esteem and confidence in which a merchant is held, so that he can buy goods, not with actual money, but by giving his Promise to pay money at a future time—that is, he creates a **Right of Action** against himself. The goods become his absolute property, exactly as if he had paid for them in Money. It is a Sale or an Exchange. The Right of action is the price he pays for them. It is termed a **Credit**—in French a **Créance**—because it is not a Right to any specific sum of money, but only a Right of Action to demand a sum of money from the merchant at a future time.

Now Aristotle said that Wealth is “Anything whose value can be measured in money”; and in accordance with this, Mill says that “Everything which has Purchasing Power is Wealth.”

Hence, a merchant's **Credit** is Purchasing Power, exactly as Money is. The merchant's **Purchasing Power** is his money **and** his **Credit**. They are both, therefore, equally Wealth by Aristotle's and Mill's definition. When a merchant purchases goods with his Credit instead of with money, his Credit is **valued in money**; because the seller of the goods accepts his Credit

as equal in value to Money. Hence, by Aristotle's and Mill's definition, which is now universally accepted, a merchant's Personal Credit is Wealth.

Demosthenes was the first person, that we are aware of, to perceive and declare that **Personal Credit is Wealth and Capital.**

He says (*Against Leptines*, 484, 20), “δυοῖν ἀγαθοῖν ὄντων Πλούτου τε καὶ πρὸς ἅπαντας Πιστεύεσθαι, μείζον ἐστὶ τὸ τῆς Πίστews, ἢπαρχον ἡμῖν.”

“*There being two kinds of Wealth—Money and General Credit—the greater is Credit, and we have it.*”

So also (*For Phormion*, 958)—“εἰ δὲ τοῦτο ἀγνοεῖς ὅτι Πίστις Ἀφορμὴ τῶν πασῶν ἐστὶ μέγιστη πρὸς χρηματισμὸν πᾶν ἂν ἀγνοήσεις.”

“*If you were ignorant of this—that Credit is the greatest Capital of all towards the acquisition of Wealth, you would be utterly ignorant.*”

Thus Demosthenes shews that Personal Credit is ἀγαθά—**Wealth**, property, goods and chattels; and Ἀφορμή—or **Capital.**

Thus, though **Personal Credit** can neither be seen, nor handled, nor transferred by manual delivery, yet it can be bought and sold, or exchanged; its *value can be measured in money*; it is Purchasing Power, and therefore it is Wealth.

And as Adam Smith declares that a man's Labour is his most sacred possession, of which no person has the right to despoil him, so to all Bankers, Merchants, and Traders, their **Credit** is their most sacred possession, of which no man has the right, falsely, to despoil them.

Hence, the Personal Credit of all Bankers, Merchants, and Traders is an integral and colossal portion of the National Wealth, just as the industrial faculties of working men of all kinds are.

So also the **Credit** of the State, by which it can purchase Money, and other things, by giving persons the Right to demand a series of future payments from it, is **National Wealth.**

Modern Economists include Personal Credit under the term Wealth.

The Economists steadfastly refused to admit that **Personal Credit is Wealth**, because they said that to admit that Credit is Wealth would be to maintain that Wealth can be created out of nothing.

But contemporary general and mercantile writers were entirely against them on that point.

Thus, Daniel Defoe says (*The Complete English Tradesman*, ch. xvii.), "Credit is so much a tradesman's blessing that it is the choicest ware he deals in, and he cannot be too chary of it when he has it, or buy it too dear when he wants it; it is a Stock to his Warehouse; it is **Current Money** in his cash chest."

So that keen metaphysician, Bishop Berkeley, who has many searching questions on Economics in his *Querist*, asks:

Quest. 35—"Whether power to command the industry of others [*i.e.* **Credit**] be not real Wealth?"

So Melon says (*Essai Politique sur le Commerce*, ch. xxiv.), "To the calculation of values in Money, there must be added the current **Credit** of the merchant, and his **Possible Credit**."

So Dutot says (*Reflexions sur le Commerce et les Finances*, ch. i. art. 10), "Since there has been a regular commerce among men, those who have need of money have made Bills, or Promises to pay money. The first use of Credit, therefore, is to represent Money by Paper. The usage is very old; the first want gave rise to it. It *multiplies* specie considerably; it supplies it where it is wanting, and which would never be sufficient without the Credit, because there is not sufficient Gold and Silver to circulate all the products of nature and art. So there is in commerce a much larger amount in Bills than there is in specie in the possession of the merchants.

"A well managed Credit amounts to tenfold the funds of a merchant, and he gains as much by his Credit as if he had ten times as much Money. This maxim is generally received among all merchants. Therefore, **Credit is Capital**."

"Credit is therefore, the greatest **Wealth** to every one who carries on commerce."

So Smith says (ib. i. ch. 10), "Trade can be extended as Stock increases, and the Credit of a frugal and thriving man increases much faster than his Stock. His trade is extended in proportion to the amount of both, i.e. his Stock and his Credit, and the more he accumulates, the more he profits in proportion to the extent of trade and his actual accumulation is proportionate to his credit."

So J. B. Say says "Private Credit = Wealth."

Marshall says "Credit is Money," i.e. Purchasing Power.

Marshall also includes "Monetary Capital."

Marshall also includes "Financial Capital."

Marshall also includes "Credit Capital."

acquired abilities." Hence, **Personal Credit** is included by Smith under the term **Capital**.

No person has more explicitly declared that **Personal Credit** is **Wealth** than Mill.

He says in his Preliminary remarks—"Everything, therefore, forms a part of **Wealth** which has a **Power of Purchasing**.

He also says (bk. iii. ch. xi. § 3)—"For **Credit**, though it is not Productive power, is **Purchasing Power**."

"The **Credit** which we are now called upon to consider as a distinct **Purchasing Power**.

He also says (bk. iii. ch. xii. § 3)—"The amount of **Purchasing Power** which a person can exercise, is composed of all the Money in his possession, or due to him [*i.e.* the Bank Notes, Bills, and Credits he has], and of all his **Credit**.

"**Credit**, in short, has exactly the same **Purchasing Power** with **Money**."

And many other passages to the same effect.

Now, if Mill lays down as the fundamental definition of **Wealth**—

"**Everything** that has **Purchasing Power** is **Wealth**,

And, if he says—

"**Credit** is **Purchasing Power**";

Then the necessary inference is that—

"**Credit** is **Wealth**."

That is a syllogism in which Mill is safely padlocked, and from which there is no escape.

Hosts of passages from other writers, to a similar effect, might be cited if necessary: but that would be wholly superfluous, because an argument is to be judged of by its own intrinsic force, and not by the number of persons who assert it.

The simple statement of the case is this—ancient writers unanimously held, and modern Economists have come, at last, to agree with them, that the only true definition of wealth is—everything whose value can be measured in money—or which can be bought and sold—everything which has **Purchasing Power**. Now, as **Personal Credit** can be valued in money, and is **Purchasing Power**, necessarily follows, by the definition, that **Personal Credit** is

Personal Credit—of a hostile Character, is **Purchasing Power**:
 at point of view Demosthenes, and now universally
 ed, But **Personal Credit** does not enter
 merchant actually exercises his **Credit**,
 it.

When a merchant purchases goods "on Credit," it is an absolute Sale, just as much as if it had been effected with money. Every transaction whatever, on Credit, is a Sale or an Exchange.

At the very instant that the Property in the goods, is transferred to the buyer, a Contract, or Obligation, is created between the two parties, which consists of two parts :—

1. The **Right to Demand** payment at the due time, in the person of the seller, or Creditor.

2. The **Duty to Pay** in the person of the buyer, or Debtor.

These two quantities constitute the Contract, or Obligation, or Bond of Law between the two parties.

The obligation consists of two equal and opposite Quantities, which may be denoted by this symbol $\left\{ \begin{array}{l} +£100 \\ -£100 \end{array} \right\}$: where the $(+£100)$ denotes the Creditor's **Right to Demand** payment, and the $(-£100)$ denotes the Debtor's **Duty to Pay**.

And, if either of these Quantities be destroyed, the other is also destroyed with it.

Hence, as these two Equal and Opposite Quantities come into existence together, and can only exist together, and vanish together, they are analogous to Polar Forces.

We have shewn the great practical importance of applying the Positive and Negative signs to Property (**Property**), and of denoting the Right to a Property in things which have already come into possession as Positive, and the Right, or Property, to things which will only come into possession at a future time as Negative. Because many species of Property are of a mixed nature: that is, the entire Property in them consists partly of Corporeal Property, and partly of Incorporeal Property. We have exemplified this in the Theory of the Value of Land (**Annuity**).

A successful Trader is an Economic Quantity analogous to the Land.

Now, a person exercising any profitable business, or profession, is an Economic Quantity exactly analogous to the Land.

The Land has produced profits in the past, but it has equal capacity to produce profits in future.

So a merchant, or professional man, may have accumulated a quantity of money as the fruits of his skill, industry, and ability in the past. But over and above his accumulated money he has the same skill, industry, and ability to earn profits in the future. His

capacity to earn profits in the future is exactly the same as his capacity to have earned profits in the past. And, of course, he has the Right, or Property, in his expected profits of the future.

And he may trade in two ways: he may trade with the money he has already acquired—the profits of the past: or he may trade by purchasing goods by giving in exchange for them the Right, or Property, to demand payment at a future time out of the profits he expects to earn in future.

Personal Character, used to trade in this way as Purchasing Power, is Credit, and, as we have seen that anything which has Purchasing Power is Wealth, it follows that Money and Credit are equally Wealth.

But it is evident that Money and Credit are **Inverse** and **Opposite** to each other. Hence, if Money is a **Positive Economic Quantity**, Credit is a **Negative Economic Quantity**.

Bastiat well says (*Harmonies Economiques*, "Art. Capital," p. 210)—
"Thus it is a wonderful thing, and thanks to the marvellous mechanism of Exchange, every service is, or may become, a Capital. . . ."

"That which is more surprising still, is that we can perform the **Inverse** operation, however impossible it may seem at first sight. We can convert into an instrument of labour, into a railway, into houses, a capital which does not yet exist, thus utilising the services which will not be rendered until the twentieth century. There are bankers who make advances on them, on the faith that the labourers and the travellers of the third and fourth generation will provide for their payment, and these titles on the future pass from hand to hand without ever remaining unproductive."

The Function of Credit is to bring into Commerce the Present Values of Future Profits.

The true function of Credit is now apparent: *it is to bring into Commerce the Present Values of Future Profits.*

When an estate in Land is sold, the Present Value of all its future Profits is expressed and brought into commerce by the Money paid for it.

The total amount of the Shares in any commercial company, banking, insurance, railway, or any other, denotes the value of the existing property of the company, together with the total **Present Value** of their **Future Profits**.

So the money paid for the goodwill of a business, a copyright, a patent, a professional practice, &c., is the Present Value of the Future Profits.

So when a merchant or trader trades on "Credit," he brings into commerce the Present Value of a Future Profit. He buys the goods or the labour, and gives as their price the Right to demand a sum to be paid out of the expected future profits.

So when the State contracts a loan for any public purpose, it buys the Money, and gives as its price the Right to demand a series of payments out of the future income of the nation.

So when municipal corporations, and other public bodies, contract loans for public purposes, they buy money by giving as its price the Right to demand a series of payments out of the future income of their constituents. That is, they bring into commerce the Present Value of their Future Income.

So Credit in all its forms, and to whatever purpose it is applied, simply brings into commerce the Present Value of a Future Profit.

The famous French wit, Rivarol, well said—"Man conquers space by commerce, and **Time by Credit.**"

Credits payable in Services.

In every Obligation or Contract, the party who has the Right to enforce the performance of the Duty is the Creditor, and the party whose Duty is to perform it is the Debtor.

The words of the Digest are general. A Credit is the Right to compel a person to **Pay** or **Do** something. Hence, large amounts of Credit are payable, not in any material substance, money or any other, but in **Personal Services**.

Thus, in feudal times, Rents were payable not only in money and in products of the earth, termed Rents in Kind, but also in Personal Services, and such Rents were termed Rent Services. And the person who has the Right to demand such services is as much a Creditor as the person who has the right to demand the payment of a material substance, and the person who is bound to render a service is as much a Debtor as the person who is bound to pay some material substance.

A jaded legislator has taken shootings in the Highlands. On the 10th of August he goes to the office of the railway, and pays five guineas for a ticket to Inverness. That ticket is a **Credit**; it is a Bill payable in a railway journey to Inverness on demand.

A person wishes to see Irving in Hamlet. He has, perhaps, to

buy a ticket for a box a fortnight in advance. That ticket is a **Credit**, or Right of Action, or a Bill payable in seeing Irving in Hamlet a fortnight after date.

A college engages one of its members, at a quarterly salary, to give lectures to its students. The lecturer gives his lectures, and, having done so, has acquired a right to demand his salary from the College. This Right of Action is the **Credit** or the **Debt**.

A member of the University gives lessons to private students. The fee is paid either in advance or after the lessons given. If the fees are paid in advance, the student acquires a Right of Action, a **Credit**, or **Debt**, against his tutor, to demand so much instruction. If the lessons are given first, the tutor acquires a Right of Action, a **Credit**, or a **Debt**, to demand payment for his lessons.

The master of a household engages servants, and agrees to pay them wages monthly, or quarterly, as the case may be. When the servants have performed these terms of service, they have a Right of action against their master for their wages. This Right of Action is a **Credit** or a **Debt**.

A person becomes a Fellow of the Zoo. In exchange for his subscription, he receives an ivory, entitling him to visit the gardens as often as he pleases during a year. That ivory is a **Credit**.

A person buys postage stamps. These stamps are Rights to demand the Post Office to carry his letters to their destination. The stamps are **Credit**.

So there are innumerable other cases where persons contract to perform professional services. These contracts to perform services are as much Obligations as Contracts to pay material services.

Hence, Credit can purchase services exactly in the same way as money can ; it is a Purchasing Power which can effect any result that Money can.

The Function of Credit is to bring into Commerce the Present Values of Future Profits.

The true function of Credit is now clear.

It is a very common idea that credit is the goods which are "lent," or the "transfer" of them.

Such ideas are utterly erroneous. We have shown that Credit is the Right to demand some person to pay or do something either on demand, or at some future time,

And the true function of Credit is to bring into commerce the Present Values of Future Profits.

When an estate in land is sold, the **Present Value** of all its **Future Profits** is expressed and brought into Commerce, or circulation, by the Money paid for it.

The total amount of the Shares in any Commercial Company, banking, insurance, railway, or any other, denotes the value of the existing property of the company, together with the total **Present Value** of their **Future Profits**.

So when a merchant, or trader, trades on "Credit," he brings into commerce the **Present Value** of a **Future Profit**. He buys the goods, or the labour, and gives as their Price the right to demand a sum to be paid out of the expected profits.

So when the State contracts a loan, it buys the money, and gives as its price the Right to demand a series of payments out of the future income of the people.

So when municipal corporations and other public bodies contract loans, they buy money, by giving as its price the Right to demand payments out of the future incomes of their constituents.

So Credit in all its forms, and to whatever purpose it is applied, simply brings into commerce the **Present Value** of a **Future Profit**, and thus augments the mass of Exchangeable, or Economic Quantities, or **Wealth**.

ON THE SELF-CONTRADICTIONS OF J. B. SAY AND J. S. MILL ON CREDIT.

In the preceding chapter we have explained the Juridical and Mathematical principles of the Great System of Credit; and have pointed out the errors which lay writers, literary and mathematical, have fallen into from a want of knowledge of the principles of Mercantile Law. But though these writers committed errors, they did not flatly contradict themselves.

We should only be too glad now to exhibit the application of these principles in practical business: but we are compelled to delay our progress in order to show the incredible self-contradictions of Say and Mill on the subject of Credit. It is, as we conceive, an essential duty of such a work as this, not only to explain the true principles of the subject, but to point out and refute all the current errors which have obtained a wide hold on popular opinion: and the mischief done by Say and Mill is infinitely too serious to be passed over.

Jurists of all nations include Rights of action, such as Credits or Debts, under the terms *Pecunia*, *Res*, *Bona*, *Merx*: χρήματα,

πράγματα, πλοῦτος, ἀγαθά, οἶκος, οὐσία, &c. : goods, chattels, merchandise, commodities : and writers on Economics, seeing that Credits in the form of Bank Notes, Bills of Exchange, &c., perform exactly the same functions in circulating commodities as Money, class Credit under the title of Capital, without giving any very nice definition of Credit or of Capital. But no one had worked out the Theory of Credit : or had demonstrated its true limits.

Everyone knows, however, that in recent times the most unsparing ridicule has been poured on the expression that "Credit is Capital." J. B. Say made the wonderful discovery that the whole world, himself included, was under a delusion : and that when they said that "Credit is Capital" they were such dolts as to maintain that the same thing can be in two places at once !

Turgot first Erred on Credit.

Turgot was the first person to introduce error on the subject of Credit. When at College in 1749, and only twenty-two years of age, he began to reflect on John Law's system of Paper Money, which had produced such a frightful catastrophe in France twenty-nine years before. In a letter addressed to the Abbé de Cicé, he used an expression which has been the keynote of a fallacy which, developed by Say and Mill, has been sedulously propagated by numerous writers, and has done boundless mischief in the subject.

He says—"In a word, all Credit is a loan : and has an essential relation to its repayment."

Here we see the gross confusion of ideas on the subject of Credit at the present day. In this passage we see that Turgot considers Credit to be an **Operation**. This is Turgot's first vital error. Credit is a **Quantity**. We have shown that Credit is the present Right to a Future Payment : and how can the Right to a future payment be an Operation ? It would be just as rational to say that a guinea or a bill of exchange is a loan. Turgot says that every Credit implies a future payment : and for that reason it has Value : and it may be bought and sold like any material chattel, like Money ; but that does not make a **Right** a **Transfer**.

Turgot's remark, therefore, that every credit implies a future payment, had nothing to do with Law's Paper Money. Law understood the principles of Credit better than any man of his day : and so long as he confined himself to Credit, he was the first financier of his age. His bank was magnificently successful, as we have shown elsewhere. It was not his system of Credit which produced

the catastrophe, but his system of **Paper Money**: he saw that the powers of Credit, though immense, were limited: and his plan was to create **Paper Money** beyond the limits of Credit, which was not redeemable in Money, any more than Money itself. His Paper Money was a new and independent standard, just like gold itself; but which he fondly dreamed could circulate independently at the same Value as gold. Hence, Turgot's remark has no application to the question.

On the Self-Contradiction of J. B. Say on the subject of Credit.

1. J. B. Say, following up the erroneous notion of Turgot on the nature of Credit, invented the phrase which so many unthinking writers have echoed from that day to this—that those who consider Credit to be Capital maintain *that the same thing can be in two places at once!!*

We shall show that all this confusion has arisen from Say never having thought out carefully the fundamental concepts of Economics: and from his self-contradiction on almost every one of them. Say's name formerly stood so high in the subject, and his sneers have been chorussed by such a multitude of writers in France and England, and the matter itself is of such transcendent importance, that we are compelled to give some space to a thorough investigation of his views. We must, therefore, inquire into his notions of *Wealth*, *Value*, *Capital*, and *Credit*.

On Say's Definition of Wealth.

2. It is very commonly supposed that Say was the first Economist to introduce immaterial products into Economics. This however we have shown is a great error, because the author of the *Eryxias* proved more than 2,200 years ago that immaterial Quantities are Wealth. Smith expressly enumerates "the acquired and useful abilities of the inhabitants" as part of the Fixed Capital of the nation. The Roman Jurists were the first to declare that Abstract Rights and Rights of Action are Wealth: in which they have been followed by all the Jurists in the world. Smith expressly includes Paper Credit under the term Circulating Capital: thus recognising the existence of three species of Wealth: exactly as the ancients had done. Say does exactly the same: and also enumerates several other kinds of Incorporeal Wealth.

Say defines Wealth thus (*Cours*, pt. i. ch. 1)—"The exclusive

possession which, in the midst of a numerous society, clearly distinguishes the property of each person, causes this sort of thing to be the only one to which in common language the name of Wealth is given [not, as the Economists held, unless it is Exchangeable] From this circumstance not only these things which are capable of satisfying directly the wants of man such as nature and society have made him, but the things which can only satisfy them indirectly, such as Money, **Instruments of Credit** (*Titres de Créance*), the **Funds**, &c.

Again, after speaking of things of Value, such as the earth, metals, money, coin, stuffs, &c., he says (*Traité*, bk. i., ch. 1.)—"If one gives also the name of Wealth to the **Funds, Commercial Paper** (*Effets de Commerce*), it is clear," &c.

Again he says (*Cours*, pt. i. ch. 1.)—"You see that Wealth does not depend on the kind of things, nor upon their physical nature, but on a **Moral Quality**, which each one calls their **Value**. Value alone transforms a thing into Wealth, in the sense in which this word is synonymous with *biens* or property. The Wealth which resides in anything, whether it be land, a horse, or a Bill of Exchange, is proportional to its Value. When we speak of things being Wealth, we do not speak of other qualities which they can have: we speak only of their Value."

Thus we have shown conclusively that Say admits that the principle of Wealth resides exclusively in *Exchangeability*: in accordance with the unanimous doctrine of ancient writers for 1,300 years: and he expressly enumerates *Titres de Créance* and *Effets de Commerce*, that is Negotiable Paper, or **Credit**, as Wealth.

On Say's Definition of Value.

3. We shall find exactly the same inconsistencies in Say's notions of Value as have been the ruin of so much modern Economics. He over and over again says that Value is something External to an object, for which it can be exchanged: and then he repeatedly speaks of Intrinsic Value: without the least idea that these are contradictory conceptions.

To show this we can only cite a few passages out of many. Thus, he says (*Cours*, pt. i. ch. 1.)—"The second circumstance to be remarked relating to the Value of things is the impossibility to appreciate its absolute magnitude. It is never anything but *comparative*. When I say that a house which I point out is worth fifty thousand francs, I affirm nothing but that the Value of this

house is equal to the sum of fifty thousand francs : but what is the Value of this sum ? It is not a Value existing by itself, and without a comparison. The Value of a franc, of fifty thousand francs, is composed of all the things which one can buy for these different sums. If one can, in giving them in exchange, have a greater quantity of corn, sugar, &c., they have a greater Value relatively to these other things : if one can have less, they have less Value : because the Value of a sum of money, like all other Values, is measured by the quantity of things which one can get in exchange.

“The idea of Value resembles the idea of distance. We cannot speak of the distance of an object without making mention of another object from which the first finds itself at a certain distance. In the same way the idea of the Value of an object always supposes a relation with the Value of something else.” That is to say, it is manifestly just as absurd to speak of Intrinsic Distance as of Intrinsic Value.

Again he says in the same chapter—“These same principles show that gold, silver, and money are not sought for themselves, and are only of the Value of what they can buy.”

We need not overload our pages with more quotations. These are sufficient to show that Say fully admits that the **Value** of a thing is what it will exchange for, or purchase ; if it will exchange for, or purchase, more, it has greater Value ; if it will exchange for, or purchase, less, it has less Value ; and if it will exchange for nothing it has no Value.

Moreover, Say repeatedly acknowledges that Value is a Quality of the Mind ; and that it is the Mind of man only which confers Value. Thus he says (*Cours, Considérations Générales*)—“Nevertheless, value is purely a **Moral Quality** ; and which appears to depend upon the fugitive and changeable will of men.”

So also—“In order that a Value may be Wealth, this Value must be recognised not by the possessor only, but by every other person.”

Here Say admits that Value does not depend upon a single mind, but upon more than one. He goes too far in saying that it must be recognised by every one else. *Two* minds are necessary and sufficient to constitute Value.

So also he says (*Traité*, p. 57.) “The Value which men give to things . . . It is always true that if men attach Value to a thing.”

Now we have shown in these passages, and we might have cited multitudes of others, if it had been necessary, that Say clearly admits that Value is not an absolute Quality of a thing ; that it is external to itself ; that the Value of a thing is anything else for which it can

be exchanged, or which it will purchase ; that Value originates in the Mind of man.

Now after these admissions, what can be more contradictory, or absurd, than for Say repeatedly to speak of **Intrinsic Value** ?

On Say's Definition of Capital.

4. We have now to lay before our readers the extraordinary self-contradictions of Say on Capital.

Say asserts that Immaterial and Incorporeal Quantities form No part of National Wealth.

He says (*Cours*, pt. i. ch. 10.)—"The nature of Capitals and the nature of their functions show us very important truths. One of them is, that Productive Capitals do not consist in fictitious and conventional values (?) but only in real and intrinsic (!) values, which their possessors judge convenient to devote to production. In fact, one cannot buy productive services except with material objects having an intrinsic (!) value. [What ! not with Credit?] We cannot amass as Capital, and transmit to another person anything but value incorporated in material objects." [What amazing nonsense. Cannot we acquire property in the Funds or in Shares of great mercantile companies as Capital, and transmit them to our descendants ; or sell them in the market ? Are not Credits or Debts sold by scores of millions every day ?]

Again (*Traité*, bk. i. ch. 13.)—"From the nature of immaterial products, it follows that we cannot accumulate them, and that they do not serve to augment the national Capital. [Cannot a man accumulate professional knowledge and make a large income thereby ? and cannot he transmit this accumulated knowledge to pupils ?] A nation in which there is found a crowd of musicians, of priests, of employés, may be a nation very much amused, well taught, and admirably well administered ; but that is all. Its capital does not receive from the labours of these working men any direct increase, because their products are consumed immediately they are created."

Again (*definitions at the end of the Traité*)—"All transmissible Capital is composed of Material Products, for nothing can pass from hand to hand but visible matter." Perhaps some things cannot pass from hand to hand : but they can pass from person to person.

Say maintains that Immaterial and Incorporeal Capital is part of the National Wealth.

He says (*Cours, Considérations Générales*)—"Since it has been proved that Immaterial Property, that talents, and acquired personal qualities form an integral portion of social Wealth."

Again he says (*Cours*, pt. iv. ch. 5)—"We must include among Capitals many *biens* which have a Value, although they are not material. The Practice of a lawyer, or a notary: the Goodwill of a shop: the Reputation of a sign: the Title of a periodical work: are incontestably Wealth: we may sell them and buy them: and make them the subject of a contract: and they are Capitals: because they are the fruits of accumulated labour. A lawyer, by the wisdom of his advice, by his assiduity, and other qualities, has made the public conceive a good opinion of his chambers: this good opinion gives him the right to larger fees: this increase of profit is the revenue of a **Capital** called *reputation*: and this Capital is the fruit of the labour and care which the lawyer has taken during many years."

He also says in a note—"There are Capitals which are not incorporated in material things, as the practice of a notary, or a commercial enterprise: but this portion of **Capital** is a very real Value."

Again—"The only immaterial **Capitals** which I know of are the Practice: the Goodwill of a shop: a Profession: of a newspaper: one can alienate, one can sell, a **Capital** of this species." We may add that Trade Secrets are a very valuable and important species of immaterial Capital.

So again (*Cours, Considérations Générales*)—"Without a classification of things possessed embraces them all in making a valuation of the Wealth of a nation, we are never certain of making them complete.

"Our property comprising our Wealth, whatever it is, comprises our Natural Qualities, as well as our social riches."

And after going through several descriptions of personal talents, he says—"What I have said is sufficient, I think, to convince you that Industrial faculties are Property of the same kind as all others: and it is only in regarding them as equal to all others that we obtain all the social advantages attached to the Right of Property. For the same reason this kind of Property, although it is difficult to be expressed in figures, forms, nevertheless, part

of the general Wealth of a nation. A nation where industrial capacities are more numerous and more eminent than elsewhere is a more wealthy nation."

Is it possible to exhibit a more melancholy picture of self-contradictions in a scientific (?) work?

Say admits that Instruments of Credit are Capital.

5. We shall now show that Say explicitly declares that **Credit** is **Capital**.

He says (*Cours*, pt. iv. p. 131)—"This is why from the moment that this Value resides in objects employed in a productive operation, I name it **Capital**, whatever be the objects in which it resides."

Again (*Cours*, pt. i. ch. 5)—"These Capital Values may consist of the Public Funds, Commercial Paper, coffee-berries, or any other merchandise which will sell."

Again (*Cours*, pt. i., p. 135)—"The form under which **Capital** Value presents itself makes no difference." He then enters into the subject more minutely (*Traité*, bk. i. ch. 30)—"A Bill on demand, or a Bill of Exchange, are obligations contracted to pay, or cause to be paid, a sum either at another time or at another place."

"The Right attached to this order (although its Value is not demandable at the time, or the place, where one is) give it nevertheless, a **Present Value**, more or less great. Thus a Bill for 100 francs, payable at Paris in two months, may be negotiated or sold for the price of 99 francs: a Bill for a similar sum, payable at Marseilles at the same time, will be worth, at Paris, perhaps 98 francs."

"Hence, a Bill of Exchange, by virtue of its future value, has a **Present Value**: it can be employed instead of Money in every species of purchase, so that the greater part of the great commercial transactions are effected by Bills of Exchange."

Again he says (*Cours*, pt. iii. div. 3, ch. 27)—"There is, nevertheless, an important observation to make relating to the representative signs of Money. It is that they are capable of rendering a service exactly similar to the Money they represent. If anyone signs an obligation by which he binds himself to deliver, at a fixed period, a cloak, made in such a fashion, this promise, although it is in some sort a sign, or pledge, of the possession of the cloak, cannot take its place: because a sheet of paper does not

protect from cold, like a cloak: while the signs which represent Money, can replace it completely, and render all the services it can. In fact, the qualities which make a bag of Money serve us in exchanges can be found in a Bill. These qualities, you will remember, are—

“First, in the Value it has. One can give a Bill exactly the same Value as to a sum of Money: in giving the bearer the right to receive the sum, so as to take away from him all doubt as to the payment, it is that a Bank Note can circulate ten years in preserving a value of a thousand francs without being paid, only because one believes that he can have the amount when he pleases.”

We have thus laid before our readers the explicit admission of Say that an Instrument of Credit may be of the Value of Money, and perform all the functions of Money.

He further says (*Cours*, pt. iii. ch. 18)—“Every private person can sign an ordinary Bill, and give it in payment of merchandise, provided that the seller consents to receive it as if it were Money. This seller, in his turn, if he is the buyer of other merchandise, can give the same Bill in payment. The second acquirer can pass it to a third with the same object. There is an Obligation which circulates: it serves him who wishes to buy: it fills the office of a sum of Money.

“The Value of a Sign depends on the Value of the thing signified: but, in order that this value may be exactly as great as that of the thing of which it is the pledge, the payment of the Bill must not only be certain, but demandable on the instant. . . .

“If Bills of Credit could replace completely metallic Money, it is evident that a Bank of circulation veritably augments the sum of National Wealth: because, in this case, the metallic Wealth becoming superfluous as an agent of circulation, and, nevertheless, preserving its own value, becomes disposable, and can serve other purposes. But how does this substitution take place? What are its limits? What classes of society make their profit of *the New Funds added to the Capital of the nation?*

“According as a Bank issues its Notes, and the public consent to receive them on the same footing as metallic Money, the number of monetary units increases. . . .

“We must not, however, think that the Value withdrawn from the sum of Money, and added to the sum of **Capital** merchandise, equals the sum of Notes issued. These only represent Money when they can always be paid on demand: and for that the bank is obliged to keep in its coffers, and, consequently, to withdraw from

circulation, a certain sum of Money. If, suppose, it issues 100 millions of Notes, it will withdraw, perhaps, 40 millions in specie, which it will put in reserve to meet the payments which may be demanded of it. Therefore, if it adds to the quantity of Money in circulation 100 millions, and, if it withdraws 40 millions from circulation, it is as if it added only 60.

We now wish to learn what class of Society enjoys the use of this **New Capital**."

Say goes on to explain how this **New Capital** is employed, and who reaps the profit on it.

Now we have shown our readers by the most unimpeachable evidence, that is by extracts from himself, that Say maintains that **Credit is Capital**: and yet perhaps they will be surprised to hear that Say is the writer who originated the sneer that those who say that Credit may be used as Capital maintain that the same thing may be in two places at once!

Say maintains that those who say that Credit is Capital affirm that the Same Thing may be in Two Places at once.

6. We shall now place before our readers the passages in which Say maintains that those who say that Credit may be used as Capital are such puzzle-headed dolts as to affirm that the same thing may be in two places at once.

He says (*Traité*, book ii. ch. 8)—"It is sometimes thought that Credit multiplies Capital. This error, which is found frequently reproduced in a crowd of works, of which some are written professedly on Political Economy [Say's own work, for example] supposes an absolute ignorance of the nature and functions of Capitals. [Say, then, himself has shown this ignorance]. A Capital is always a very real Value fixed in a matter: [Say has himself given several examples of Capital which are not fixed in a matter] because immaterial products are not susceptible of accumulation: [Say himself has given several examples to the contrary] *and a material product cannot be in two places at once, and serve two persons at the same time.* [Who said it could?] The constructions, the machines, the provisions, the merchandise, which comprise my Capital may be the amount of the Values I have borrowed: in this case I carry on my industry with a Capital which does not belong to me (!), and which I hire (!): but certainly the Capital which I employ is not employed by another. He who lends it to me is debarred from the power of working it elsewhere. A hundred persons can merit the

same confidence as I : but this Credit, this confidence merited, does not multiply the sum of disposable Capitals : it only causes less Capital to be kept without use."

He also says (*Cours*, pt. i. ch. 9)—"The manufacturer who buys on Credit raw materials, borrows from the seller the value of this merchandise for the time of the Credit which he gives him : and this Value which he lends him is furnished in merchandise, which are material values (!!)"

"Hence, if one can only borrow and lend Capital in material objects, what becomes of the maxim that Credit multiplies Capitals? My Credit can cause me to dispose of a material value which a capitalist has placed in reserve : but if he lends it to me, he remains deprived of it : he cannot lend it to another person at the same time : the manufacturer who uses this value, who consumes it, to accomplish a productive operation, prevents another manufacturer employing it as his own."

The reader has only to compare these extracts drawn from Say himself to be amazed at their contradictions.

In the first set Say himself admits that Instruments of Credit are Wealth : and he admits that if a Bank can maintain in circulation a greater amount of Notes than it keeps gold in reserve, it augments by so much the Capital of the country.

In the second set he considers the Credit to be the **Material goods lent** : and then he asks with a triumphant sneer, how can the same material goods be in two places at once!!

We need not say a word more.

On the Self-Contradiction of Mill on Credit.

4. 1. Turgot was the writer who, as we have shown above, started the erroneous notion that Credit is the **Transfer** of something.

J. B. Say further extended the error by supposing that Credit is the Goods which are "lent" : and then he ridiculed the doctrine that "Credit is Capital" by sneeringly remarking that the same thing cannot be in two places at once!

These two sentences have been repeated by a multitude of unthinking writers in France and England from that day to this.

The number of writers who have reiterated these absurdities is so great that we have no room to notice them : especially as we have shown the misconceptions and self-contradictions of Turgot and Say, who originated these errors.

J. S. Mill, as is well known, has repeated this silly sneer, and we have now to examine whether Mill is any more consistent with himself than Say

Mill admits that Personal Credit is Wealth.

2. We have first to show that Mill admits that **Personal Credit is Wealth.**

In accordance with the unanimous doctrine of ancient writers for 850 years, Mill says (*Preliminary Remarks*, p. 4)—

“Everything, therefore, forms part of Wealth which has Purchasing Power.”

Then he says (book iii. ch. 11, § 3)—

“For Credit, though it is not ‘Productive’ Power, is Purchasing Power. . . .

“The Credit which we are now called upon to consider as a Purchasing Power.”

Again (book iii. ch. 12, § 2)—

“The amount of Purchasing Power which a person can exercise is composed of all the Money in his possession and due to him [*i.e.*, of all the Bank Notes, Bank Credits, Bills of Exchange, &c., belonging to him]: and of all his Credit.”

So (book iii. ch. 12, § 3)—**“The inclination of the mercantile public to increase their demand for commodities by making use of all or much of their Credit as Purchasing Power.”**

And (book iii. ch. 11)—**“Credit in short has exactly the same Purchasing Power as Money.”**

Now if Mill gives as a definition—

“Everything which has Purchasing Power is Wealth.”

And if he says that—

“Personal Credit is Purchasing Power.”

Then the necessary inference is that—

“Personal Credit is Wealth.”

That is a Syllogism from which there is no escape.

Mill admits that Credit is an Independent and Transferable Quantity.

3. The heading of one of Mill's chapters (book iii. ch. 11, § 3) is—**“Of Credit as a Substitute for Money.”** Now if one quantity can be a substitute for another, it must be of the same general nature. If a person wants wine and cannot get it, he may put up

with small beer as a substitute: but a pair of shoes could never be a substitute for a glass of champagne.

Now if Credit can be a substitute for Money, Credit must be of the same general nature as Money. But Money is an Independent Exchangeable Quantity: therefore Credit must also be an Independent Exchangeable Quantity.

Accordingly Mill speaks of (book iii. ch. 12, § 5)—“Credit Transferable from hand to hand.”

He also says (book iii. ch. 12, § 1)—“But we have now found that there are other things, such as Bank Notes, Bills of Exchange, and Cheques, [which Mill admits are Credit] which circulate as Money: and perform all the functions of it.”

Hence we see that Mill admits that Personal Credit is an Independent Quantity: and circulates exactly like Money: and produces all the effects of Money.

Mill admits that Rights are Wealth.

4. Having shown that Mill admits that Personal Credit is Wealth: we have now to show that he admits that **Rights are Wealth.**

He says (book iii. ch. 12, § 3)—“An Order or Note of hand or Bill of Exchange [which are Credit] payable at sight for an ounce of gold, while the Credit of the giver is unimpaired, is worth neither more nor less than the gold itself.”

That is as the Italian proverb says—“Che oro vale, oro è”—“*That which is of the Value of Gold, is Gold.*”

That is, Mill admits that an abstract Right, whether recorded on paper or not, which is sure of being paid in gold, is of exactly the same Value as gold: which is self-evident, because the Gold is the Value of the Promise.

These rights include Banking Credits, Bank Notes, Cheques, Bills of Exchange; Exchequer Bills; Navy Bills; Dividend Warrants: Book Debts of traders; and private and personal Debts.

Now, these Rights are all included under the Title of Credit. Hence Mill admits that Credit in all its forms, which is sure of being paid in gold, is of exactly the same Value as Gold; and, therefore, is Wealth equally with Gold.

All these Rights, or Credit, are payable in a definite sum in Gold; and, therefore, they have a fixed Value in Gold.

Mill also (book iii. ch. 12, § 5) speaks of Credit in the

forms of Bank Notes; Cheques; Promissory Notes; Bills of Exchange, &c.

Now all these Instruments are Rights to a Future Payment: therefore Mill admits that a **Credit** is the **Present Right** to a **Future Payment**.

Mill admits that Credit may be used as Capital.

5. We have shown that Mill admits that Credit circulates as Money, and performs all the functions of it.

Now one of the functions of Money is to be used as Capital: and, therefore, if Credit performs all the functions of Money, Credit may be used as Capital as well as Money.

Further on (book iii. ch. 22, § 2) he is still more explicit—"The Value saved to the community by thus dispensing with metallic Money is a clear gain to those who provide the substitute. They have the use of 20,000,000 of Circulating Medium, which have cost them only an engraver's plate. *If they employ this accession to their fortunes as Productive Capital* [Mill, as we have seen, denies that Credit is Productive], the produce of the country is increased, and the community benefited as much as by any other **Capital** of equal amount. . . . When Paper Currency is supplied, as in our own country, by Bankers and Banking Companies, the amount is almost wholly turned into **Productive Capital**. . . . A Banker's profession being that of a money lender, his issue of Notes is a simple extension of his ordinary occupation. [We shall show hereafter that all this is a gross delusion.] He lends the amount to farmers, manufacturers, or dealers, who employ it in their several businesses. So employed, it yields, like any other **Capital**, wages of labour, and profits of stock. . . . The **Capital** itself, in the long run, becomes entirely wages, and when replaced by the sale of the produce, becomes wages again; thus affording a perpetual fund of the value of 20,000,000 for the maintenance of Productive Labour."

And he also says (book iii. ch. 11, § 1, *note*)—"Now an effect of this latter character naturally attends some extensions of Credit, especially when taking place in the form of Bank Notes, or other instruments of exchange. The additional Bank Notes are in ordinary course first issued to producers or dealers to be employed as **Capital** . . . and there is a real increase of **Capital**."

Mill admits that Credit may be used as Productive Capital.

6. Now, if Mill admits that anything which has Purchasing Power is Wealth.

And if he says that Credit is Purchasing Power.

And if he admits that Bank Notes, Cheques, Bills of Exchange, &c., Circulate as Money, and perform all the functions of Money.

And if he admits that Bank Notes, &c., may be used as **Productive Capital**.

Then **Credit** may be used as **Productive Capital**.

This is a Sorites from which there is no escape.

Mill denies that Credit is Productive Power.

7. And yet the very same Mill says (book iii. ch. 11, § 3)—

“For Credit, though it is **Not** Productive Power, is Purchasing Power.”

“It is **Not** a Productive Power in itself.”

“Although, therefore, the Productive Funds of the country are **Not** increased by Credit.”

And several other passages to the same effect.

Mill sneers at those who say that Credit is Capital.

8. Having thus shown that Mill admits that Credit is an Independent Quantity—that it is the Present Right to a Future Payment—that it is embodied in the form of Bank Notes, Cheques, Bills of Exchange, &c.—that they are Transferable from hand to hand—that they Circulate like Money, and perform all the functions of Money—and that they may be used as Productive Capital—it may surprise some readers who are not used to Mill, to hear that Mill not only denies that Credit is Capital, but sneers at the imbecility of those who say that it may be so used.

In the chapter headed—“Of Credit as a substitute for Money,” he says (book iii. ch. 11, § 1)—“The functions of Credit have been a subject of as much misunderstanding and as much confusion of ideas as any single topic in Political Economy. . . .

“As a specimen of the confused notions entertained respecting the nature of Credit, we may advert to the exaggerated language so often used respecting its national importance. [By whom?] Credit has a great, but not, as so many people seem to suppose, a magical power—[Who said it has?]

nothing. [Yes, it can.] *How often is an extension of Credit talked of as equivalent to a creation of Capital, or as if Credit actually were Capital?* [Why! who has said more distinctly than Mill himself that Credit may be used as Capital; and that Credit is Capital? The very object of the preceding extracts is to show that Credit may be used as Capital, exactly in the same way that Money is.] It seems strange that there should be any need to point out that Credit, being only the permission to use the Capital of another person, the means of production cannot be increased by it, but only **Transferred**. [Mill admits that Bank Notes, &c., are Credit; are Bank Notes, &c., the permission to use the Capital of another person?] If the borrower's means of production and employment of labour are increased by the Credit given him, the lender's are as much diminished. [Nonsense; in every operation on Credit the lender, *i.e.* the seller of the goods, receives as the price of them a Bill of Exchange which he can either use for further purchases, or discount with his banker, and so get ready money for it. The same sum cannot be used as Capital both by the owner and also by the person to whom it is lent. [Who said it could?] It is true that the Capital which A has borrowed from B, and makes use of in his business, still forms part of the Wealth of B [Nonsense; he has *sold* it to A and got a Bill in exchange for it] for other purposes, he can enter into arrangements in reliance on it, and can borrow when needful an equivalent sum on the security of it; so that to a superficial eye it might seem as if both B and A had the use of it at once. [Only to the superficial eye of a logician.] But the smallest consideration will show that when B has parted with his Capital to A, the use of the Capital rests with A alone, and that B has no other service from it than in so far as his ultimate claim upon it serves him to obtain the use of another Capital from a third person C. All Capital (not his own) of which any person has really the use, is, and must be, so much subtracted from the Capital of someone else. . . .

“But though **Credit** is but a **Transfer of Capital** from hand to hand.”

And several other passages to the same effect.

Confusion of Mill on Credit.

9. The reader cannot fail to see the astounding confusion of Mill's ideas on Credit in the preceding extracts.

In the first set he says that Credit is the **Right** to a future payment—that it is an *Independent Quantity* which is bought and

sold, and transferred from hand to hand like Money—and may be used as Capital like Money.

In the second set he makes Credit to be the **Transfer of Capital**: or an **Operation**.

That is, Mill cannot perceive the difference between an **Independent Quantity** and an **Operation** ! !

Now we ask—Is a Bank Note the Transfer of a commodity? Is a Guinea the Sale of a book? Is a Table the Transfer of a chair? Is a piece of Independent Property of any sort the Transfer of anything else? Is an **Independent Quantity** of any sort an **Operation**?

Mill says that Credit is the Transfer of Capital: and then he speaks of Credit Transferable from hand to hand !

Now, how is it possible to Transfer the Transfer of Capital? To Transfer Capital is an Operation: also when Credit is transferred from hand to hand it is an Operation. But how is it possible to **Operate** upon an **Operation**?

Mill informs us that Credit cannot make something out of Nothing. Who said it could? Can a guinea make something out of Nothing?

It is not Credit which makes something out of nothing—but the Credit itself—the Right of Action—the Present Right to the future payment—which Mill admits to be of the Value of the Gold promised—which is created out of nothing by the mutual consent of the parties to the contract—which Right by the reiterated admission of Say and Mill is capable of circulating like Money, and performing all the functions of Money: and, therefore, it may be used as Capital exactly like Money.

Money is used as Capital by being exchanged away for other things, goods, or labour; or by circulating other things: and Credit may be used to circulate goods, or labour, precisely in the same way.

Moreover, we see how completely Mill is in error when he says that Credit is never anything else than the transfer of Capital. Credit is used to an enormous extent to purchase Labour: just as Money is: and Credit is also used to an enormous extent to purchase other Credits: as will be shown more fully when we come to exhibit the mechanism of Banking.

After this exposition our readers will perhaps think that Mill is not exactly the person to sneer at others for their confused notions about Credit; though his own work is a striking example of the misunderstanding and confusion which he says prevail upon the

subject. And many may perhaps wonder at a logician who is unable to perceive the difference between an **Independent Quantity** and an **Operation**.

After this melancholy exposure of Mill—and this brick is in reality a specimen of the whole house—who is, or was till lately, the logical Pope of the British people, a good many persons will think that there is considerable truth in Carlyle's caustic remark that professed writers on logic are the most illogical of writers.

Contrast between the Idola, or False Concepts, of Credit and Debt, and the True Ones.

5. There is no method so effective for exterminating False Concepts, or *Idola*, of things as to bring them into sharp and close contrast with the true ones. We shall, therefore, place in array for summary execution after the manner of the Chinese, the False Notions, or *Idola*, of Debt and Credit, which have so bewildered and misled ill-informed writers.

The reader must therefore observe that—

A Debt is *Not* Money owed by the Debtor.

A Debt is *Not* a subtraction from the Property of the Debtor.

A Debt is *Not* Money in the possession of the Debtor, to which the Creditor has a right.

A Debt is the Abstract *Personal Duty* of the Debtor to *Pay* or *Do* something.

A Credit is *Not* the thing lent.

A Credit is *Not* the Transfer of anything.

A Credit is *Not* a Title to any specific Money or Goods.

In popular language, Credit is the personal reputation which a person enjoys, in consequence of which he can buy Money, or Goods, or Labour, by giving in exchange for them a Promise to pay at a future time.

But "A Credit" in Law, Commerce, and Economics, is the Right of Action which one Person, the Creditor, has to compel another Person, the Debtor, to Pay or Do something.

And this Right of Action is termed perfectly indifferently both in Law and common usage, a Credit or a Debt.

And the word Debt is used perfectly indifferent to mean the Creditor's Right of Action, and the Debtor's Duty to Pay.

And the Creditor can sell this Right of Action to any one he pleases. And it has Value because it will be paid, or exchanged, for the thing promised, at the fixed time.

It is, therefore, Merchandise, or a vendible Commodity : and it has Value for exactly the same reason that anything else has Value.

And because these Credits, Debts, or Rights of Action, can be bought and sold or exchanged like any material chattels, and in fact they form the most colossal branch of commerce at the present day : they are termed *Pecunia, Bona, Res, Merx*, in Roman Law : *χρήματα, πράγματα, οἶκος, ἀγαθά, οὐσία, οὐσία ἀφανής*, in Greek Law : Goods, Chattels, Commodities, Merchandise, Incorporeal Wealth, in English Law : and Wealth and Capital in Economics.

Sir Charles Lyell says that when a strange proposition is published to the world, it screams out that it is false : then that those who maintain it are Atheists : and then, lastly, that every one knew it already.

When nearly forty years ago, we said in a former work that Credit is Capital, which doctrine we first learned from Adam Smith, and to which, from our knowledge of the Banking system of Scotland, we gave a most hearty assent, there was a shout of scorn and derision from many writers in England and France : Whately thought it necessary to enter into a long argument to prove to the Dons at Oxford, that an Economist is not necessarily an Atheist : and now we have clearly shown that every one knew already that Credit may be used as Capital.

CURRENCY PRINCIPLE.

We must now explain the meaning of this term, which has acquired much importance, because it has been asserted by influential writers that it is the only true principle of issuing Bank-notes, and the Bank Act of 1844 professes to be founded on it.

The express function of a Bank being to issue Credit, it has been maintained by certain influential persons that a Bank should only be permitted to issue as much Credit as the specie paid in, and no more ; and that its sole function should be to exchange Credit for Money and Money for Credit, and thus the quantity of Credit in circulation would always be exactly equal to the Money displaced.

This is the doctrine distinctively known by the name of the “**Currency Principle.**” It is the doctrine which the supporters of the Bank Act of 1844 asserted to be the only true one, and which that Bank Act was especially designed to carry out.

This doctrine is supposed to be of modern origin, and the latest

refinement in the Theory of Banking. But this is far from being the case ; it was first formulated in China in 1309.

That country had been plagued for 500 years with the excessive issues of inconvertible paper by the Banks, which gave rise to immense public confusion and distress. In 1309 the author of a work named *Tsao-min*, recounting the disasters caused to China by this paper money, recalls the excellent effects which a former proper paper issue produced. "Then," says he, "it was ordered that the offices of the rich merchants who managed the enterprise, when the Notes were paid in the Money came out, and when the Bills came out the Money went in. The Money was the mother, the Note was the son ; the son and the mother were reciprocally exchanged for each other."

Several Banks have been constructed on this principle, such as those of Venice, Amsterdam, Hamburg, Nuremberg, and others.

These places, small in themselves, were the centres of a great foreign commerce ; and, as a necessary consequence, large quantities of foreign coin of all sorts of different countries and denominations were brought by the foreigners who resorted to them. These coins were, moreover, greatly clipped, worn, degraded. and diminished. The degraded state of the current coin produced intolerable inconvenience, disorder, and confusion among merchants, who, when they paid, or received payment of, their bills, had to offer or receive a bagful of all sorts of different coins. The settlement of these bills, therefore, involved perpetual disputes—which coins were to be received and which not, and how much each was to count for.

In order to remedy this intolerable inconvenience, it became necessary to institute some fixed and uniform standard of payment, so as to insure regularity of payments and a just discharge of debts.

To effect this purpose, the magistrates of these cities instituted a Bank of Deposit, into which every merchant paid his coins of all sorts and countries. They were weighed, and the Bank gave him Credit in its books for the exact bullion value of the coins paid in. The owner of the Credit was entitled to have it paid full weighted coin on demand.

These Credits therefore insured a uniform standard of payment, and were called Bank Money—*Moneta di Banco*—and it was enacted that all bills on these cities, above a certain small amount, should be paid in Bank Money only.

As this Bank Money was always exchangeable for coin of full weight on demand, it was always at a premium, or *agio*, as

compared with the clipped, worn, and degraded coin in circulation. The difference was usually from 5 to 9 per cent. in the different cities. The term *agio* is misleading, because it is evident that it was the *Moneta di Banco* which was the real legal standard, and the current coin was at a discount.

These Banks professed to keep all the Coin and Bullion deposited with them in their vaults. They made no use of it in the way of business, as by discounting bills. Thus the Credit created was exactly equal to the specie deposited, and their sole purpose was to exchange Credit for Money and Money for Credit.

These Banks were examples of the **Currency Principle**. They were of no use to commerce further than to insure a uniform standard for the payment of debts. They made no profits by their business; *and no bank constructed on the Currency Principle can, by any possibility, make profits*. The merchants who kept their accounts with the Bank paid certain fees to defray the expenses of the establishment.

These Banks were Banks of Deposit, because the Money and Bullion placed with them were merely placed with them for safe custody and keeping. But they were not Banks in the true modern sense of the word, because the money deposited with them did not become their absolute property, to deal with as they pleased. They were simply trustees of the money, and they had no right whatever to use it for their own profit. However, they were Banks in a certain sense of the word, because the word *Banco* means a store, or heap, and they were stores of money. In modern language they would be called Treasuries. They were not the Bankers but the Treasurers of the merchants, and they were obliged to take a solemn oath that they would keep in their vaults all the Coin and Bullion deposited with them. Nevertheless, both at Venice and Amsterdam the magistrates violated their trusts and their solemn oaths, and advanced large sums to the Government, which ultimately led to their ruin.

DEBT (*see also* CREDIT).

On the Three Ambiguities in the Theory of Credit, or Debt.

We have now to notice three perplexities, or Ambiguities, in the Theory of Credit, or Debt, which have been the cause of an immense amount of confusion and misconception, which the reader must carefully observe.

First Ambiguity.—*A Debt is not the Money owed by the Debtor, but the Abstract Personal Duty to pay the Money.*

I. We have now to explain the meaning of the word **Debt**, about which there is great misconception. It is one of the examples of words, which, in early jurisprudence and classical Latin, meant a **Material** Thing, but has come in the progress of civilisation and jurisprudence to mean solely a **Right** and a **Duty**.

We think it absolutely certain that in classical Latin the word *Debitum* means the **Material** thing, whether Money or any other which is due. And in this we are confirmed by the high authority of Professor H. Nettleship, of Oxford.

The idea that the word Debt means the Money due is very common at the present day, and has greatly impeded the due apprehension of the nature of Credit.

Many literary and mathematical writers suppose that a Debt is the Money due: or Money in the debtor's possession to which the Creditor has a Right.

This very common error, of which we shall hereafter produce several examples, is expressly provided for in the Digest.

It is said¹—"Obligationum substantia non in eo consistit ut aliquod **Corpus** nostrum faciat: sed ut **Alium** nobis adstringit ad **Dandum** aliquod, vel **Faciendum**, vel **Prestandum**."

"The essence of Obligations does not consist in this, that it makes any specific **Goods** our property: but that it binds some **Person** to **Pay** us something: or to **Do** something: or to **Guarantee** something."

Pothier well says²—

"The Right which the Obligation gives the Creditor of proceeding to obtain payment of the thing which the Debtor is obliged to give him, is not a Right in the **Thing** itself (*Jus in re*): it is only a Right against the **Person** of the Debtor for the purpose of compelling him to give it (*Jus ad rem acquirendam*). The thing which the Debtor is obliged to give continues to belong to him: and the Creditor cannot become proprietor of it except by the delivery, real or fictitious, which is made to him by the Debtor in the performance of the Obligation.

"And till this delivery is made the Creditor has nothing more than the **Right** of demanding the thing: and he has only that

¹ *Digest*, 44, 7, 2.

² *Traité sur les Obligations*.

Right against the **Person** of the Debtor who has contracted the Obligation.

“Hence it follows, that if my Debtor who has contracted the Obligation to give a thing to me, transfers it upon a particular title to a third person, whether by sale or donation, I cannot demand it from the party who has so acquired it, but only from my Debtor. The reason is, as the Obligation does not, according to our principle, give the Creditor any Right in the thing which is due to me, which I can pursue against the person in whose hands it may be found.”

This doctrine is most true and most important. Suppose a Creditor comes to his Debtor and demands payment of his Debt: and the Debtor has the very Money wherewith to pay his Debt in his hand: he may still, nevertheless, give it away, or spend it under the very eyes of his Creditor: and the Creditor has no legal right to prevent him.

So Gide says¹—“A Debt is not the **Material** object, the Money: but the **Juridical** object, the **Duty to Pay**.”

So Williams says²—“Every person who borrows Money on mortgage or not, incurs a Debt or **Personal Obligation** to repay it out of whatever means he possesses.”

The distinction is perfectly plain, and of the greatest importance in Economics. If the Creditor has the Right to any specific Money in the Debtor's possession, that would be a diminution of the Debtor's property: he would have no right to spend, or part with it: and there would be only one Economic Quantity in existence—the Money.

But as a matter of fact, the whole of the Money remains the Debtor's property, which he can sell, donate, or exchange as he pleases. And also there is the Right, or Property, in the person of the Creditor, which he can sell, or exchange, as he pleases: and which may be sold, or exchanged, any number of times till it is paid off and extinguished. Hence, in this case there are two Economic Quantities in existence, which may each circulate in commerce at the same time.

To consider a Debt as a sum of money in the Debtor's possession to which the Creditor has a Right, is to confound the distinction between a **Trustee** and a **Debtor**. A trustee merely *holds* money which is in reality the property of the *Cestui que trust*: it is in no sense whatever his property: he

¹ *De la Novation*, p. 139.

² *Law of Personal Property*, p. 304.

has no right to use it for his own purposes: and, therefore, there is only one, and not two, Economic Quantities in existence.

If the Creditor's Right were the Right to a specific sum of Money in the Debtor's possession, it would follow that a Debtor could never be insolvent: because if he had no money, his Creditor could have no Right. But, unfortunately, this is far from being the case. In too many cases persons are insolvent: *i.e.*, they are under the Duty to pay Money, and have no money to pay it with; but the Creditor's Right to demand exists whether the Debtor has any money to pay it with or not.

If the Creditor's Right were the Right to a specific sum of money, it would follow that the Quantity of Credit could never exceed the Quantity of Money: but this is entirely contrary to fact: every Jurist knows perfectly well that Credit is itself a Marketable Commodity, a Merchandise, and the amount of it in existence and circulation in this country is about 100 times the Quantity of Money.

Hence the reader must carefully observe that a **Debt** is simply the abstract Personal Duty to pay money, and has no reference to any specific sum of Money.

Second Ambiguity.—*The word Debt means both the Creditor's Right of Action and the Debtor's Duty to Pay.*

II. The second Ambiguity is this. It has been shown that the word **Debt** means in the first instance the Debtor's Personal Duty to pay money—and not the money which is due. But it has long been used both in Law and common usage to mean the Creditor's **Right of action** as well; and is thus used as synonymous with **Credit**. And a Creditor's Right of action is termed perfectly indiscriminately a **Credit** and a **Debt**.

As has been said above, the word *Debitum* in classical Latin denotes the Material thing, whether Money, or any other, which is owed. But in the Pandects the word **Debitum** is used as synonymous with **Obligatio**: the Bond of Law, or Contract, between the Creditor and the Debtor; and therefore it includes both the Creditor's *Right to Demand* and the Debtor's *Duty to Pay*.

In classical Latin a Creditor's Right of action was termed **Nomen**. But in course of time, while *Obligatio* always continued to mean the *Nexus*, or Contract, between the two parties, the word *Debitum* split up into two parts, and was used to mean both the

Creditor's *Right of Action* and the Debtor's *Duty to Pay*, quite indiscriminately.

In the twelfth century the word *Debitum* was commonly used to mean a Right of Action. In 1194, Richard I. issued instructions for a judicial visitation on financial matters, in which it was ordered—

“Omnia **Debita** Judæorum inbrevientur, terræ, domus, redditus, et possessiones.”

“*Let all the Debts (i.e. Rights of Action) of the Jews be scheduled, their lands, houses, rents, and possessions.*”

“Item quilibet Judæus jurabit super rotulum quod omnia **Debita** sua et vadia, et redditus, et omnes res et possessiones suas inbreviari faciat.”

“*Also let every Jew swear that he will make a true return of all his Debts (Rights of Action), pledges, rents, and all his property and possessions.*”

In mediæval charters the word **Debitale** was used in the same sense. Thus in one of 1324, it says—

“In omnibus et singulis bonis . . . dominiis, baroniis, censibus, redditualibus, **Debitalibus**, servitutibus, homatgiis.”

“*In all and singular goods . . . lordships, baronies, revenues, rents, Debts (Rights of Action), servitudes, homages.*”

In another, of 1374, it is said—

“Acquisiverunt redditus, census annuos, et **Debitalia** in fœdis . . . quorum redditorum, censuum, et **Debitalium**.”

“They have acquired rents, annual revenues, and **Debts (Rights of Action)** in fee . . . of which rents, revenues, and **Debts (Rights of Action)**.”

A Statute of the City of Placentia, in 1386, clearly shows that *Debitum* and *Nomen* were synonymous¹—

“Nullus homo Plac. emat vel aliququaliter acquirat aliquod **Debitum** vel **Nomen** seu revisamentum contra Comm. Placentiæ.”

Thus the words *Debitum* and *Debitale* were already at this period used to mean Rights of Action, and as synonymous with *Nomen*, in public instruments; and if they were so used in public instruments, it is clear that that must long have been their well-understood meaning in common usage.

In English Law the word Debt has long been used to mean a Right of Action. Thus in the Statute of Acton Burnell, 11 Edward I. (1283), commonly called the Statute of Merchants, it is said—

“Pur ceo qe merchauntz qi avaunt ces houres unt preste lur aver

¹ PAPA D'AMICO, *Titoli di Credito*, p. 89.

a diverse genz, sunt cheuz en poverte, pur ceo qe il ni aveit pas si redde ley purvewe, par la quele il poeint lur **Dettes** hastivement recoverir.

“Le Rei par luy par sun conseil ad ordine e establi, qe marchaunt qi veut estre seur de sa **Dette**.”

“E si le Meire ne troesse achatur face par renable pris liverer les moebles al Creauzur, desqe a la somme de la **Dette** en allowance de sa **Dette**.”

By which it appears that at that time the word **Debt** had already acquired in English law the meaning of a **Right of Action**: a meaning which it has ever since retained, both in Law and common usage.

So it is said in *Les Termes de la Ley*, first published in 1567—

“Dett est un brief que gist lou ascun somme d’argent est due au un par reason d’accompt.”

“**Debt** is a **Writ**,” &c.

So Ashe says—

“Quel Det, Duty, Chose-in-action, ou Droit.”

So in the Act, 46 Geo. III. (1806), c. 125, s. 3, it is enacted that one **Debt**, or **Demand**, may be set off against another.

So Williams says—

“Within the class of *Choses-in-action* was comprised a **Right** of growing importance, namely, that of suing for Money due: which Right is all that is called a **Debt**.”

“We have seen that a **Debt** was anciently considered as a mere Right to bring an action against the Debtor.”

“When a **Debt**, or **Demand**, is equitable only.”

“**Debts** being formerly considered mere **Rights of Action**.”

So as may be seen in any daily paper the executors of deceased persons advertise for any persons who have “**Debts**, Claims, or Demands” against the estate to give in a statement of them.

Ortolan says¹—“Sous le premier point de vue le droit personnel se nomme chez nous **Creance**: chez les Romains *Nomen* moins généralement **Creditum**.”

Which Messrs. Prichard and Nasmyth translate—

“Under the first point of view a Personal Right is called by us a **Debt**: among the Romans, **Nomen**, less usually **Creditum**.”

In which they are right, because *Créance* in French, is the Right of Action which a Creditor has against a Debtor: which is, as we have seen, the meaning of Debt in English Law.

¹ *Généralisation du Droit Romain*, pt. ii. ch. ii. § 196.

So Major-General Deane, the Commissioner of the Commonwealth, agreed with the Marquis of Argyll that, if he would remain quiet and not disturb the Government, he should “enjoy his liberty, estate, lands, and **Debts**, and whatever duly belonged to him.”¹

So John Bunyan, fearing arrest,² made over to his wife “all his goods, chattels, **Debts**, ready money, plate, rings, household stuff, apparel, utensils, brass, pewter, bedding, and all his other substance.”

It is so perfectly well known that in English Law the word Debt means both the Creditor’s Right of Action and the Debtor’s Duty to pay, that it is used in both senses in the same Act of Parliament.

Thus, in the Supreme Court of Judicature Act, 36 and 37 Vict. (1873), c. 66, s. 28, § 6, it is said—

“Any absolute assignment in writing under the hand of the Assignor of any **Debt** or other legal **Chose-in-Action**.”

Where the word **Debt** means the Creditor’s **Right of Action**.

But in the same section, § 1, it is said—“Whose estate may prove to be insufficient for the payment in full of his **Debts** and **Liabilities**.”

Where the word Debt means the Debtor’s **Duty to Pay**.

An administrator is appointed by the Court of the “Goods, Chattels, **Credits**” of the deceased.

Thus we see from all these passages that **Creditum = Nomen = Debitum**: and that in Law the words “**Credit**” and “**Debt**” are used synonymously to mean the Creditor’s **Right of Action**.

It is exactly the same in common usage: a person makes his will, bequeathing his **Debts**, *i.e.* his **Rights of Action**.

So in the Law of Scotland, **Debts** are included under the title of Movable Rights. And in a Scotch marriage contract it is usual for the bride to transfer to her intended husband “all goods, gear, **Debts**, sums of money, and other movable estate.”

Accordingly in the Digest of the Law of Bills of Exchange which we prepared for the Law Digest Commissioners we began with this fundamental definition—

“**Credit** or **Debt** in Legal and Commercial [and Economical] language, means a **Right of Action** against a Person for a sum of Money.”

We need not give any more examples. The reader must carefully observe that the word **Debt** is used, both in English Law and common usage, quite indiscriminately to mean both the Creditor’s

¹ Burton’s *Hist. of Scotland*, vol. vii. p. 48.

² Froude’s *Bunyan*, p. 87.

Right of Action and the Debtor's **Duty to Pay**: and it requires constant vigilance to perceive in which sense it is used.

The word **Duty** also originally meant a **Right**: thus the King's Duties meant his Right to levy customs. This meaning appears in the extract from Ashe above cited: but it is seldom used in this sense now.

The word **Right** had also this double meaning in English. Thus Lord Shelburne said in the House of Lords—"He would think that America had as good a **Right** to pay taxes as Britain," *i.e.* it was as much their **Duty** to do so.

The word **Right** is but seldom, if at all, now used in this sense in England at the present day; but it is quite common in Scotland to say—"I have no **Right** to do that"; *i.e.* it is not my **Duty** to do it.

The word *χρέος* in Greek has also this double meaning: it originally meant the actual thing owed, like *Debitum* in Latin, or the Duty to pay it; but the Greek jurists used *χρέος* to mean the Right of Action.

Thus Demosthenes says—

"τὴν οὐσίαν ἅπασαν χρέα κατέλιπε"—*He left all his Property in outstanding Debts, i.e. Rights of Action.*"

In the Basilica, *χρέος* is used as synonymous with *Nomen*, *Créance*, a Right of Action.

So in German the word *Schuld* properly means a Debt or Liability: accordingly *Schuldner* properly means a **Debtor**: but Austin says that *Schuld* has also the double meaning, and that in German Law *Schuldner* is often used to mean the Creditor.

In French the words *Droit* and *Dette* are also used in the double sense of the Right and the Duty: but in the Creditor's case it is termed the *Droit* or *Dette Active*; in the Debtor's case it is termed the *Droit* or *Dette Passive*.

Thus Littré says—

"**Dettes Actives**: celles qu'on a le droit d'exiger le paiement."

"**Dettes Passives**: celles qu'on est obligé de payer."

Créance: Droit d'exiger l'accomplissement d'une obligation: . . . on oppose les droits de créance au droits réels."

That is, Personal Rights, or *Jura in personam*, are distinguished from Real Rights, or *Jura in re*.

Thus the student must carefully observe that all these words which denote a Contract, or Obligation, between two persons, such as *χρέος*, *Debitum*, *Debitale*, **Right**, **Debt**, **Duty**, *Droit*, *Dette*, *Schuld*, are used quite indiscriminately with respect to both parties;

and it requires constant vigilance to determine in which sense they are used.

The explanation of this seeming confusion is this: *χρέος* comes from *χρῆ*, it is fit, or ordained: *Debitum* means that which is due: Right, from *rectum*, that which is ordered: and if one person has the Right to Demand, and another has the Duty to Pay, a sum of money, it is equally fit, due, ordained, and right, that the one person should receive, as that the other should pay; hence they are equally *χρέα*, Debts, Duties, and Rights.

On the Continent it is usual to term a Person's Rights simply his *Actif*, and his Liabilities his *Passif*, the words Droit or Dette being understood: thus in the accounts of a bank its Liabilities are termed its *Passif*, and its assets, its *Actif*.

Third Ambiguity.—*On the double Meaning of the words "Lend," "Loan," "Borrow"; or the distinction between the Mutuum, δάνειον or δάνεισμα: and the Commodatum, or τὸ χρησάμενον.*

III. The third Ambiguity has been the cause of immense misconception in modern times on the subject of credit; but as we have given a full exposition of it under **Lend** and **Loan**, we need not repeat it here.

On the Creation of Obligations.

Personal Credit, or Mercantile Character, is Purchasing Power: and, as first pointed out by Demosthenes, and now universally acknowledged, is Wealth. But Personal Credit does not enter into Economics until the merchant actually exercises his Credit, and makes a purchase with it.

When a merchant purchases goods "on Credit" it is an absolute sale, just as much as if it had been effected with money. He acquires the actual property in the goods as fully and effectually as if he had paid for them in money. In exchange for the goods he gives his Promise to pay their price at a future time. That is, he creates a Right of Action against himself. This Right of Action is a Credit, or *Créance*, or Debt, and is the Price of the goods, and is the property of the seller.

Thus, at the very instant that the Property in the goods is transferred to the buyer, a Contract, or Obligation, is created between the two parties, which consists of two parts—

1. The **Right to Demand** payment in the person of the seller, or Creditor.

2. 'The **Duty to Pay** in the person of the buyer, or Debtor.

These two Quantities constitute the Contract, Obligation, or Bond of Law between the two parties.

The Obligation consists of two equal and opposite Quantities : and may be denoted by this symbol $\left\{ \begin{array}{c} + \text{£}100 \\ - \text{£}100 \end{array} \right\}$: where the $(+ \text{£}100)$ denotes the Creditor's **Right to Demand** payment : and the $(- \text{£}100)$ denotes the Debtor's **Duty to Pay**.

Also, if either of these Quantities be destroyed, the other is also destroyed with it.

Hence, as these two Equal and Opposite Quantities come into existence together : can only exist together : and vanish together : they are analogous to Polar Forces.

Division of Opinion among Jurists as to the Position of the Debtor in an Obligation.

9. We have now come to the most subtle and abstruse point in all Economics, which will demand the closest attention : because it is the great Serbonian bog in which multitudes of writers, literary and mathematical, have been swallowed up, from a want of knowledge of the most elementary principles of Mercantile Law and practical business : and its rectification and elucidation will open up a completely new branch of inquiry of the greatest novelty and interest.

When an Obligation has been created between two parties by the sale of Money or Goods "on Credit," the case of the Creditor is clear : in exchange for the Money or Goods he has received a Right of action—which is termed a **Credit** or a **Debt**—which is his Property : and which he can sell, or dispose of, in any way he pleases, for other Goods, or for Money.

But a strong division of opinion exists among Jurists as to the position of the Debtor in the Obligation.

When a merchant has bought goods "on Credit," and has given a Bill at three months for them—*Is he in Debt at the Present Time?*

Roman Jurists and English Jurists hold different doctrines on this point.

When an Obligation was contracted the Roman Jurist said *dies credit* : when it became payable they said *dies venit*.

"Cedere¹ diem significat incipere deberi pecuniam : Venire diem significat cum diem venisse quo pecunia peti possit."

¹ *Digest*, 50, 16, 213.

“‘*Cedit dies*’ means the day on which money begins to be owed; ‘*venit dies*’ means the day on which it may be demanded.”

The Roman Jurists held that the money was due from the day on which the Obligation was contracted; but that the **Remedy** was suspended until the day of payment came.

“Id¹ quod in diem stipulamur, statim quidem debetur: sed peti priusquam dies venerit non potest.”

“*That which we agree to pay on a future day is indeed due at once, but it cannot be sued for until the day of payment has come.*”

Paulus says²—“Præsens obligatio est, in diem autem dilata solutio.”

“*The obligation is present, but the payment is deferred until the fixed day.*”

Ulpian says³—“Ubi in diem (quis stipulatus fuerit) cessit dies, sed nondum venit.”

“*Whenever anyone has agreed to pay a sum on a fixed day, the obligation has begun to run, but the day of payment has not come.*”

So it was a maxim of Roman Law—“Debitum in presenti solvendum in futuro.”

“*The money is due at present, but it is only to be paid in future.*”

This doctrine throws considerable confusion into the nature of an Obligation, and it was probably due to the fact that the Jurists had not yet completely emancipated themselves from the idea that *debitum* meant the money actually due; and was only then beginning to acquire the meaning of the abstract Incorporeal Contract, which it means now.

But English Jurists hold quite different doctrine. As in English Law and common usage the word **Debt** (passive) means simply the abstract Personal Duty to pay, English Jurists hold that no Debt is created until the Duty to pay comes into existence, *i.e.* until the day of payment has come.

It is a maxim of English Law that Credit unexpired may be pleaded under the General Issue; which means that if an action is brought against a person who has contracted an Obligation payable at a future time, before the day of payment has come, he may reply that he is not in Debt at all.

Thus Pitt Taylor says⁴—“In addition to these examples, it may be observed that whenever the defendant can show that in fact *no*

¹ *Instit. Just.* iii. 15, 2.

³ *Digest*, 50, 17, 213.

² *Digest*, 45, 1, 46.

⁴ *Law of Evidence*, vol. 1.

Debt ever existed before action brought, he may do so under the plea of *never indebted*.

“Thus, for instance, if the action be for goods sold and delivered, he may defend himself under the plea by proving that they were sold on **Credit** which was **unexpired** when the action was commenced.”

To understand the following discussions, the reader will find it very useful to fix these principles in his mind—

1. When a person is only bound to pay a sum of money on a future day, *he is not in Debt at the present time*.

2. That if a person has contracted to pay a sum of money at a future day, his Creditor has no Right to any of his property, he has no *Jus in rem*, it is only a claim against his Person, or a *Jus in personam*.

A few examples will illustrate these principles.

1. Suppose that a tenant takes a house or an apartment, and agrees to pay the rent quarterly. Suppose that the day after he had entered into possession the landlord came and demanded his rent. What would the tenant say? He would say—“My good friend, Mr. Landlord, I owe you nothing. The bargain is that I am to have the use and enjoyment of this house for three months before the rent becomes due and payable. My Debt, or Duty to pay, does not come into existence till then ; good morning to you.”

2. So when a farmer takes a farm on a lease of 19 years, and agrees to pay the rent half-yearly, the agreement is that he is to have the use and enjoyment of the farm for intervals of six months, before each instalment of rent becomes due. The successive rents are intended and expected to be paid out of the successive profits made out of the farm. And it is obviously absurd to say that the farmer is indebted at the present time for rent which only becomes due 19 years hence ; and is intended and expected to be paid out of profits which will only come into existence 19 years hence.

3. The same is obviously true in the case of a merchant who has bought goods, and given in exchange for them his promise to pay money for them three months hence. He is not in Debt at the *present* time. The agreement is that he is to have the property in the goods for three months, and to dispose of them in any way he pleases, so as to make a profit out of them ; and it is expected on both sides that he is to pay his bill out of the profits realized by the goods. No Debt or Duty to pay comes into existence until the Bill becomes due and payable ; and the amount of the Bill is not to be *subtracted* from his present property.

4. It is commonly said that this country is "in Debt" about £750,000,000. The answer is that this country is not "in Debt" one penny. For a person to be "in Debt" means that he is liable to pay a sum of money on demand. Does anyone suppose that the Creditors of the country can call upon her to pay £750,000,000 on demand? What the country has undertaken to do is to pay an annuity of about £7,000,000 quarterly. And as soon as one quarter's annuity is paid she is not in debt until next quarter-day comes round. It would be just as absurd to say that the farmer is in Debt at the present time for nineteen years' rent. The sum of £750,000,000 is merely the Sum of the Present Values of the annuity.

5. This principle strongly applies to a case of Conscience. Suppose that a kind-hearted instructor engages to prepare a student for one of the Public Services—say the Indian Civil Service—and on his success agrees to take an Obligation payable five years after date. On entering the service the Candidate is asked if he is in Debt. He most properly and conscientiously replies that he is "not in Debt"; because he has no sum of money which is payable by him on demand. He is only bound to pay at the end of five years; and it is quite understood on both sides that his Obligation to his instructor is to be redeemed out of his annual salary.

This case is an example of *Novation*, which will be more fully described in a future section. When the Candidate has won his appointment in the Indian Civil Service, he is no doubt in Debt to his instructors. But if the instructor agrees to take an Obligation payable five years after date, that Obligation pays, extinguishes, and discharges the Debt payable on demand; and no new Debt arises until the Obligation becomes due. The Release of the Debt payable on demand is the Consideration for the Obligation payable five years after date.

The importance of the consideration consists in this. It is commonly supposed that when a person has to make a payment at a future time, the sum due is to be *subtracted* from his *present* property, and is a diminution of it. It is usual to denote Debts by the Negative Sign $-$; and according to this view if a person possessed £100, and was bound to pay £30 three months hence, and therefore his property would be represented by £100 - £30; it would mean that his property was only £70. On a larger scale it would mean that all the Obligations in the nation were to be *subtracted* from all the property in the nation. But this view is

entirely erroneous. In this case the sign – does not mean subtraction. What it does really mean will be shewn further on.

The Debtor has the full property in his £100, to do with exactly as he pleases. His duty to pay has no present existence; it is no *subtraction* from his *present* property. The expression is not to be read as if his property were only £70. The debt is a mere abstract Personal Duty; and a Personal Duty cannot be *subtracted* from a material sum of hard money. The expression is to be read in this way. He possessed £100 in money, but coupled with the Duty to pay £30 at some future given time. Hence the sign – does not mean *subtraction* in this case, it is a mere *Memorandum* that he has to make an exchange, by buying up a Right of Action, at some future time.

Advantage of adopting the Conception of Economics as the Science of Commerce or Exchanges.

We now see the advantage of adopting and firmly grasping the conception of Economics as the Science of Commerce, or Exchanges. Because all the mechanism and phenomena of the great System of Credit, or the Creation, the Circulation, and the Extinction of **Debts**—which are a hopeless puzzle and an inscrutable perplexity, so long as Economics is treated as the “Production, Distribution, and Consumption of Wealth”—become perfectly clear and simple when it is understood to be the Science of Commerce or Exchanges.

Every case of a “Loan” of Money, or a Sale of Goods, “on Credit” is an exchange, or an act of commerce. In exchange for the Money, or the Goods, a Right of action is created, and this Right of Action is the Credit, or the **Debt**, and is the price of the goods. This Right of Action is a Saleable Commodity, and it has Value because it will be paid in money. This Right of Action, or Debt, may circulate in commerce exactly like a piece of money, and effect exchanges exactly like a piece of money, until it is paid off and extinguished, and then it ceases to exist.

The Debt was created by one Exchange; it then may effect any number of exchanges; and when it becomes due, the holder of it brings it to the Debtor, who gives the Money, or some other form of Credit, in exchange for the Right of Action. Thus the Debt is created by one exchange, and is annihilated or extinguished by another exchange, and thus the whole system and operations on Credit are merely a series of Exchanges.

On the Transfer of Credits or Debts.

Rights of Action, Credits, or Debts are now clearly shown to be the **Name** of a certain species of Merchandise, Goods, Chattels, or Commodities, and they can be bought and sold exactly like any other Merchandise or Commodities.

When it is seen that a Bank Note passes from hand to hand like Money, it might perhaps be supposed that any other Debts might be sold and transferred with equal facility. This, however, is a very great error. There is very considerable subtlety about the sale of Debts, and it was only by very slow and gradual degrees that Debts became freely saleable.

If it were asked what discovery has most deeply affected the fortunes of the human race, it might probably be said with truth—The discovery that Debts are saleable Commodities.

When Daniel Webster said that Credit had done more, a thousand times, to enrich nations, than all the mines of all the world, he meant the discovery that Debts are saleable Commodities, or Merchandise, that they may be used as Money, and that they produce all the effects of Money.

We must now trace the origin and progress of the power of selling Debts, and place this branch of Mercantile Law on solid foundations.

On Property held in Contract, or on Jura in Personam.

Property, or Rights, are of two species—

1. The Property or Right to a specific chattel, termed in Law a **Jus in rem**, or **in re**, without being related to any one else. This kind of Right is also called *Dominium*. When a person has such a sole and exclusive Right in any chattel, he may sell and transfer it to any one else at his own good will and pleasure, and without asking the consent of any one else.

Money, corn, cattle, timber, jewels, &c., are subject to this kind of Property, and hence the proprietor of such chattels may freely alienate, sell, denote, or transfer them to any one else he pleases.

2. Property, or Rights, held in Contract, or Obligation, called in Roman Law a **Jus in Personam**, or a **Jus ad rem** (*acquirendam*); where a person has a Right not to any specific thing, but only against a **Person** to compel him to **Pay** or **Do** something.

A simple example of this is the Contract, or Obligation, of Debt, where one person, the Creditor, has the Right to demand a sum of

Money from another person, the Debtor, or has the Right to compel him to **Do** something. In such a case the Creditor has no right to any specific sum of money, or chattel, in the Debtor's possession. And the Creditor's right against the Debtor exists whether he has any Money to pay, or not; and equally the Debtor's duty to pay exists whether he has any Money to pay, or not. In fact the Contract, or Obligation, is a purely abstract relation existing between the two parties, without any reference to any specific money, or other chattel.

The former kind of Rights are called **Real Rights**, or **Corporeal Property**, because they are the Right to certain specific things, or chattels. The latter are called **Personal Rights**, because they are mere abstract Rights against a **Person**, and as the Person is always specified and definite, they are also called **Nominate** Rights, but as they are wholly severed from any specific chattels, they are one species of **Incorporeal Property**.

*Property, or Rights, held in Contract or Obligation, are of
Two kinds.*

But Property, or Rights, held in Contract, or Obligation, are of two kinds.

1. Where there is a Right to demand on one side, and the Duty to pay, or do, on the other, such as the relation between Creditor and Debtor, or Landlord and Tenant in modern times.

Such a Relation is termed a **Unilateral Contract**.

2. Where each party to the Contract has the Right to demand and also the Duty to perform something: such as the *Nexus*, or Obligation, between Landlord and Tenant in Feudal Law: or that between Master and Servant at the present time: or that of Marriage.

Such a Relation between the two parties is termed a **Bilateral**, or **Synallagmatic, Contract**.

Formerly it was held universally that when Property was held in Contract of either sort, Unilateral or Bilateral, neither party could substitute another person for himself without the consent of the other party to the contract. This rule must evidently hold good in all Bilateral Contracts. When one person agrees to accept another person to perform the Duty, he of course believes that that person can perform the Duty. But he cannot be compelled to accept another person to perform that Duty without his own consent, because he cannot be sure that that other person is able to perform

the Duty. Neither if a person has agreed to perform a duty to another, can he be compelled to perform it to some one else, without his own consent.

Thus, so long as the feudal law retained its pristine rigour, neither the Lord nor the Vassal could substitute any one else for himself, without the consent of the other party. Each of the parties had Duties to perform : the Vassal to render true and loyal service : and the Lord to render due protection and defence. And neither party could attorn¹ the other, or turn him over, to any one else without his own consent.

As Sir Martin Wright says²—"As the feudatary could not aliene the feud without the consent of the Lord, so neither could the Lord aliene, or sell, or transfer, his seignory or superiority to another without the consent of the feudatary. For the obligations of the superior and inferior were mutual and reciprocal : the feudatary was really as much interested in the conduct and ability of the Lord, as the Lord was in the qualifications and ability of his feudatary. And as the Lord could not aliene, so neither could he exchange, mortgage, or otherwise dispose of his seignory without the consent of his vassal. Again, as the vassal, or feudatary, could not aliene, or neither could he devise, or dispose of the feud by will, or by any means (when the feuds were become hereditary), prevent or vary the feudal course of succession."

So in the case of Master and Servant at the present day. A Master cannot attorn, or transfer, his household to another master without their own consent, as if they were cattle or slaves. Neither can a servant substitute any one else for himself, without his master's consent.

So if a person contracts to do any work for another, he cannot substitute another person for himself, without the consent of the other party to the contract.

The same principle formerly held good when the Contract was Unilateral, as in the case of Creditor and Debtor. The Creditor could not transfer his Right of action against the Debtor to any one else, without his consent, because the Debtor never agreed to pay any one except his own Creditor. And the Creditor had no power to stipulate that the Debtor should pay any Transferee of the Debt.

It is a rule of law, as well as of common sense, that no person can be made a party to a contract without his own consent : and no one can stipulate for another without his authority.

¹ *Bracton*, 2, 35, 13. *Litt.* 551, 567, 568.

² *On Tenures*, p. 30.

Thus Ulpian says¹—"Alteri stipulari nemo potest."

"No one can stipulate for another."

Unless, therefore, the Debtor had given authority to his Creditor to transfer his Right, the Creditor had no power to guarantee his Transferee that the Debtor should pay him.

Accordingly, both in Roman and English Law, for a long period, the Creditor could not transfer his Right of Action against his Debtor without his consent, so as to enable the Transferee to sue the Debtor in his own name.

But both in Roman and English Law the Creditor might transfer his Right with the consent of the Debtor. If the Debtor consented, the Creditor, the Debtor, and the Transferee might meet together: and the Creditor might transfer his Right to the Transferee, and the Debtor might agree to pay the Transferee.² In such a case the Transferee acquired a Right of Action against the Debtor. The release of his duty to pay his own Creditor was the consideration for his promise to pay the Transferee. The Debtor was released from his debt to his own Creditor, and the Creditor was released from his Debt to the Transferee.

This transaction may be regarded in two lights—either as the mere transfer of the Creditor's Rights to the Transferee, or as the Creation of a new Contract which cancelled, discharged, and extinguished the former one. In the latter view it was what is called in Roman Law a *Novatio*.

But, nevertheless, though it may be true in theory that a Creditor cannot transfer his Right of Action without the consent of the Debtor, yet, in the progress of civilization and mercantile ideas, traders who had sold their goods on Credit began to perceive that they might utilise their Credits, or Debts, by using them like Money to purchase fresh goods with; and so they began to insist upon the Right to transfer and sell their Debts, like any other property, and there was a very good reason for this, because in the Contract, or Obligation, of Debt, there is manifestly a strong distinction between the two parties, the Creditor and the Debtor.

The Debtor cannot substitute a new Debtor for himself, because the Creditor may not have the means of knowing the solvency of the substituted Debtor; as, for instance, no Debtor can compel his Creditor to accept payment of a Debt in the Notes of a country banker, or in another person's Cheque.

Therefore, by the very nature of things, the consent of the Creditor is necessary to the substitution of a new Debtor.

¹ *Digest*, 45, i. 38.

² *GAIUS*, ii. 38.

But the case of the Debtor is quite different. If a person really owes a Debt, and has the means of paying it, it cannot make the slightest difference to him whether he pays it to A or to B, so long as he can get a valid discharge for it, and is not liable to pay it twice over.

Hence it is evident that while it might seriously prejudice a Creditor to have a new Debtor assigned to him, of whom he might know nothing, the assignment of a new Creditor can be no real prejudice to the Debtor.

In course of time Creditors both in Rome and England insisted on having the right to sell their Debts, and certain legal devices were adopted to enable the Transferee to obtain payment from the Debtor, even although he had not given his consent to the transfer. Till at last Creditors in both countries established their right to do so, even without the consent of the Debtor.

Thus, at last, after centuries of conflict, Credits or Debts have come to be as freely transferable as Money itself; and in fact they are for all practical purposes in all respects equivalent to an equal increase of Money. And thus they come to be both *Jura in personam* and *Jura in re*. And it is this absolute freedom of the sale of Debts which has been the principal cause of the stupendous progress and magnitude of modern commerce.

On the Transfer of Credits or Debts in Roman Law.

It has just been shown that originally, in the Unilateral Contract between Creditor and Debtor, the Creditor could not sell or transfer his Debt, or Right of Action, to anyone else, so as to enable the Transferee to sue the Debtor without his own consent.

The Transferee could not sue the Debtor, because he never made any promise that he would pay the Transferee, and thus there was no privity of contract between them, and the Creditor could make no engagement that the Debtor should pay the Transferee, because no person can stipulate, or make a contract for another person, without his consent.

If, however, the Debtor agreed that his Creditor might transfer his Right of Action, it might be done. The Debt being a mere abstract Right, was not capable of being transferred by manual delivery, but it could be transferred by Oral consent.

The Creditor, the Debtor, and the Transferee met together,¹ and the Creditor with the assent of the Debtor, transferred his Right to

¹ GAIUS, ii. 38.

the Transferee by word of mouth. The Debtor agreed by word of mouth to pay the Transferee; the Creditor then, by word of mouth, released the Debtor from his Debt to him; and the Transferee by word of mouth released the Creditor from his debt to him.

A new Contract was created, which cancelled and extinguished the two preceding ones: and it was, therefore, called **Novatio**: and the assignment of the Debtor to the Transferee was termed **Delegatio**: when this solemn stipulation was completed, the Transferee might sue the Debtor in his own name: because there was now a privity of contract between them.

As the commercial spirit increased at Rome, Creditors began to perceive that they might utilise their Debts by using them like Money in commerce to buy fresh goods with: and they soon began to devise means of transferring them, even without the consent of the Debtor. Accordingly, though they could not divest themselves of the legal estate in their Debts, so as to enable the Transferee to sue the Debtor in his own name, in course of time certain legal devices were adopted, so as to enable the Transferee in an indirect way to recover the debt from the Debtor, even though he had not given his consent to the transfer of the debt.

We have now to trace the steps in Roman Law by which a Creditor came at last to have the legal right to sell or transfer his debt, without the consent or knowledge, and even against the consent, of the Debtor: and the Transferee acquired the right to sue the Debtor in his own name.

The early simplicity of the Code of the XII. Tables knew nothing of Trustees, or Attorneys. Every man was either the absolute proprietor of a thing or he was not.¹ He who possessed the legal estate was termed *Dominus ex jure Quiritium*, or the proprietor by the common law of the Romans. It knew nothing of double or subordinate rights. The Code of the XII. Tables allowed no man to sue in the name of another in private cases.² He alone who was *dominus ex jure Quiritium* might sue, and that in person: and as no man could sue unless there was some contract, or relation, between them, the transferee of the debt could not sue the debtor, because there was no privity of contract between them.

The Code of the XII. Tables was maintained in all its strictness for about 277 years. During all this period the forms of writs of action were defined with the greatest strictness. They were called *Legis Actiones*: or, as we might say, Common Law writs: and as long as these lasted, no one could sue in the name of another, or

¹ GAIUS, ii. 40.

² *Ibid.* ii. 82; *Digest* 4, 17, 123; *Basil.* ii. 3, 123.

on behalf of another. Consequently, as far as we can understand, the Transferee of a debt could in no way, direct or indirect, maintain an action against the Debtor.

But in the progress of time, new rights, new interests, new wants, and new ideas grew up: and a great equitable jurisdiction came into existence to meet these new requirements. The supreme judicial magistrates, the City and Foreign Prætors, were clothed with the power *Adjuvandi vel supplendi: vel corrigendi: juris civilis gratiâ, propter utilitatem publicam*. The Romans had so deep a reverence for their Code, which Cicero declares to contain in one chapter more utility than all the libraries of the philosophers,¹ that the Prætors were not allowed actually to abolish any of its laws: but only to supply their defects, and to extend their meaning. But new rights and new interests had grown up, which were not capable of being protected directly by law, unless by the actual repeal of some of the provisions of the Civil Code.

Among these new Rights were Equitable Interests. One person might be possessed of the legal estate in certain things: but permit another to enjoy their use and profit: without undergoing the formal solemnity of the transfer by mancipation, or the *cessio in jure*. The original owner therefore possessed the *nudum jus Quiritium*, or the mere legal estate: while the transferee possessed the profitable, equitable, or as the mediæval jurists termed it, the *Bonitarian* use. But the Code of the XII. Tables gave no Right of Action to the equitable owner.

Thus if a Creditor transferred his Debt, or Right of Action, without the consent of the Debtor, he alone possessed the *nudum jus Quiritium*, or the legal estate in it: but the Transferee possessed the equitable right to it: but he had no Right of Action on it, by the Code of the XII. Tables.

About the year 577 A.U.C. or 176 B.C. the *Lex Æbutia* abolished the old *Legis actiones*, which were not part of the XII. Tables: but only a series of writs framed by the magistrates, so as to be adapted to them. New forms of writs were prepared under the authority of the Prætors, called *Formulae*: and these were adopted and extended by two *Leges Juliae*, about 45 B.C.: and about 25 B.C.²

By those new *formulae* parties were allowed to be represented by *Cognitores* or *Procuratores*, that is, by Attorneys, who were allowed to sue on behalf of their clients. The Transferee of the debt was then allowed to sue as the *Cognitor* or *Procurator* of the Transferor.³ Gaius gives the *formulae* in such a case.⁴

¹ *De Oratore* i. 4. ² GAIUS, iv. 30. ³ GAIUS, ii. 39. ⁴ GAIUS, iv., 86.

The Prætor could only grant an *actio directa*, or *vulgaris*, to the original Creditor, but he could grant an *actio utilis*, or *fictitia*, to the Transferee of the Debt.

When a Creditor sold his Right of Action he was said *cedere* or *mandare actionem*.¹ The Transferee was called *Procurator in rem suam*:² and he was acknowledged as the real plaintiff, *si in rem suam datus sit procurator loco domini habetur*: his mandate could not be revoked, and he owed no account to his principal.³

Such was the state of the Law regarding the sale or transfer of Debts in the time of Gaius, who is generally supposed to have written his *Institutes* in the time of the Antonines. They were the text-book of Law throughout the whole Empire when the Romans abandoned Britain, and many high authorities suppose that they were greatly the source and origin of the Common Law of England, and the Common Law of England with regard to the sale or transfer of Debts was exactly that stated by Gaius.

Soon after the time of Gaius, however, the Emperor Alexander Severus published a Constitution by which the absolute freedom of the sale of Debts without the knowledge or consent of the Debtor was recognised and allowed.

Ulpian says⁴—“*Nomina eorum qui sub condicione vel in diem debent, et emere et vendere solemus: ea enim res est quæ emi et venire potest.*”

“*We are accustomed to buy and sell Debts payable on a certain event or on a certain day: for that is Property which can be bought and sold.*”

Justinian in 531 declared it to be lawful to sell all actions, real as well as personal.⁵

“*Certi et indubitati juris est, ad similitudinem ejus qui personalem redemerit actionem, et utiliter eam movere suo nomine conceditur, etiam eum qui in rem actiones comparaverit eadem uti posse facultate.*”⁶

“*It is clear and undoubted law, that just as he who has bought a Personal action may sue out a writ in his own name, so he who has bought a Real action has the same power.*”

So also⁷—“*Nominis venditio etiam ignorante vel invito eo adversus quem actiones mandantur, contrahi solet.*”

“*It is usual to sell a Debt without the knowledge, or even against the consent of the Debtor.*”

¹ *Digest*, 15, 33, 5; 16, 3, 2; 17, 1; 19, 1, 31; 44, 7, 7; 46, 3, 76.

² *Ibid.* 3, 30; 17, 1, 8, 10; 44, 4; 4, 18, 24.

³ *Codex*, 4, 10, 1.

⁴ *Digest*, 18, 4, 17.

⁵ *Codex*, 4, 39, 9.

⁶ *Ibid.* 4, 39, 9.

⁷ *Ibid.* 4, 39, 3.

So also—"Omnium rerum quas quis habere vel possidere, vel persequi potest, venditio recte fit."

"All things which one may have or possess, or has the right to sue for, may be lawfully sold."

So also¹—"Nomina quoque in diem vel sub conditione contracta veneunt."

"Debts, also, due on a certain day, or on a certain event, may be sold."

In the time of Gaius, the Transferee of a Debt could only sue as the Attorney of the Transferee, as he was obliged to allege the legal estate, or *jus Quiritium*, of the Transferor; but Justinian took away the necessity for this, and abolished the *nudum jus Quiritium*, as an antiquated relic of old Roman law which was only an enigma which puzzled law students,² and then the Transferee could sue in his own name.

Diocletian enacted—"Ordinarium visum est post nominis venditionem uti emptori (sicut responsum est) vel ipsi creditori postulanti dandæ actiones."

"It is seen that it is usual, after the sale of a Debt, to grant a writ either on the demand of the buyer (as has been decided), or of the creditor himself."

Thus, at length, Debts were completely emancipated from the general rules affecting Property held in Contract. They were made as freely saleable as any material chattels: and they were thus removed from the category of Property held in Contract to that of Property held in Dominion: and thus Debts became both *Jura in personam* and *Jura in re*.

These laws affecting the sale, or transfer, of Debts were confirmed in the Basilica.

Thus, it is said³—"καὶ ὅτι τὰ ὑπὸ ἡμέραν, καὶ τὰ ὑπὸ αἵρεσιν χρέα πιπράσκονται."

"Debts payable on a certain day and on a certain event may be sold."

So also⁴—"καὶ ὅτι τὸ πούρον χρέος ὑπὸ αἵρεσιν πιπράσκεται καὶ ὑπὸ αἵρεσιν πούρως."

"A simple Debt may be bought conditionally, and a conditional Debt simply."

So again⁵—"ἡ τοῦ γραμματείου πράσις καὶ ἀγνοοῦντος καὶ μὴ βουλομένου ἐκείνου, καθ' οὗ ἐκχωροῦνται αἱ ἀγωγαί, δύναται συνίστασθαι."

¹ Digest, 18, 4, 17.

⁴ Ibid. 19, 4, 68.

² Codex, 7, 25.

⁵ Ibid. 19, 4, 27.

³ Basil. 19, 4, 16.

"A Debt may be sold without the knowledge, and even against the consent of the Debtor."

Thus, the interests of commerce effected the perfect freedom in the sale of Debts. Both by the *Digest*, which was the Code of the Western Empire, and the *Basilica*, which was the Code of the Eastern Empire, Debts were declared to be as freely saleable as Money, or any other chattel.

Thus Azo, one of the legal luminaries on the revival of juridical studies in the West, says—

"De actionibus autem venditis sciendum est quod omnes actiones vendi possunt, sive sint puræ, sive conditionales, sive reales, sive Personales."

"But with respect to the sale of actions, it must be known that all Rights of Action, whether simple or conditional, whether Real or Personal, may be sold."

Nevertheless, although it was the general law of the Empire that all Debts might be freely sold, it was found to work so much hardship, that many cities in the Middle Ages passed local laws prohibiting the sale of Debts within their jurisdiction.

This investigation clears up a difficulty which has puzzled some modern writers. The earliest Bills of Exchange extant, which are preserved in the archives of Venice, contain no words of negotiability; and yet we know as a fact that they were negotiated. Several writers have endeavoured to discover when Bills of Exchange were made negotiable. Some have attributed it to Cardinal Richelieu. But all doubts have now been cleared up. Bills of Exchange required no words of negotiability to make them negotiable: they were as transferable as Money itself, by the general mercantile law of Europe.

This also explains a fundamental distinction between the Common Law of England and the Common Law of Scotland, with respect to Bills of Exchange. By the Common Law of England, unless a Bill of Exchange is drawn payable to "order" or to "bearer": that is, unless it is made transferable by the consent of the Debtor expressed on its face: it cannot be transferred so as to enable the Transferree to sue the Acceptor in his own name. But by the Common Law of Scotland, a Bill of Exchange requires no words of negotiability to make it transferable: the Law of Justinian on mercantile matters is the Common Law of Scotland: a Bill of Exchange is therefore in its very nature transferable by the *lex loci contractûs*. and being so, a Scotch Bill is negotiable in England without any words of negotiability. Moreover, by the

Law of Scotland, a Debtor is bound to accept a Bill drawn upon him by his Creditor, and is liable to an action for non-acceptance. This, however, is not the case in England: a Debtor in England is not bound to accept a Bill drawn upon him by his Creditor, and this distinction has been preserved and confirmed by the Bills of Exchange Act of 1882. And the reason of this difference is that the Law of the Pandects and the Basilica is the Common Law of Scotland, while the Common Law of England is that of Gaius.

Equity, however, always adopted the Law of the Pandects, which allowed the free sale of Debts; and, consequently, though the Transferee of a Bill which contained no words of negotiability could not maintain an action at law against the acceptor, he could always sue him in Equity, in case of need. But the Supreme Court of Judicature Act of 1873 enacts that in all cases in which the rules of Equity conflict with those of Common Law, the rules of Equity shall prevail; consequently, Bills of Exchange are now transferable without any words of negotiability.

On the Extinction of Obligations.

On the Limits of Credit.

We have now to consider the various methods by which Obligations are extinguished. Credit being the Right to demand some person to pay or do something; and Debt the Duty of that person to pay or do something: of course when the Debtor has paid or done the thing he is bound to do he has fulfilled and discharged his Duty, and therefore the Right of the Creditor is satisfied and extinguished; and thus the Obligation is annihilated and extinguished.

It has been shown over and over again that Credit is the name of a Species of Property, Commodity, or Merchandise, of the same nature as, but inferior in degree to, Money; that it fulfils exactly the same function as Money as a Medium of Exchange and Circulation. It is a Property, Commodity, or Merchandise cumulative to Money; and is in all its effects on prices and production exactly equivalent to an equal sum of Money.

Credit is, in fact, to Money what Steam is to Water; and like that power, while its use within proper limits is one of the most beneficial inventions ever devised by the ingenuity of man, its misuse by unskilful and unscrupulous persons has produced the most fearful calamities. Credit, like Steam, has its limits; and we have now

to investigate the proper limits of Credit ; and to explain the various methods by which it is extinguished.

Credit, no doubt, is of the same nature as Money, being the Right or Title to a future payment. But there is this difference between them, that there is no time limited in which the holder of Money shall demand a satisfaction for it ; nor is it limited to any particular satisfaction. He may keep it as long as he pleases himself ; or he may transmit to his descendants, and they may receive a satisfaction at any time they please for the services done by their ancestor.

But Credit is always created with the express intention of being, or of being capable of being, extinguished at a certain short definite time ; at least Mercantile Credit is, of which alone we are treating here. It is unextinguished Credit which produces those terrible monetary cataclysms which scatter ruin and misery among nations. It is chiefly by the creation of excessive Credit that over-production is brought about, which causes those catastrophes called Commercial Crises ; and it is the inability of Credit shops to extinguish the Credit they have created—commonly called the failure of Banks—which is the cause of the most frightful social calamities of modern times.

The true limits of Credit may be seen by the meaning of the word. Because all Credit is the promise to pay or do something in future ; and that something, whatever it is, is the Value of the promise or Credit. That something need not necessarily be Money, it may be anything else ; it may be any other chattel ; or it may be a promise to do something.

The Credits, however, which are the subject of this work are always promises to pay Money, and it is just on this point that literary Economists are utterly at fault. Because a Bill, or Note, is an Obligation to pay money, many uninformed writers suppose that they must always be paid in Money or Bank Notes, and therefore that the issues of Credit must always have a fixed and definite relation to the quantity of Money in a country ; or in mathematical language are a *definite* function of it ; now it is true that Credit must always bear a relation to the Money in the country ; but it is not a *fixed* relation ; it depends to a very great extent, indeed, on the organisation of the system of Credit ; hence as the quantity of Credit to Money varies according to the different methods in which Credit is organised, we may say, if we may coin the term, that Credit is a *contingent* function of Money.

To show how extremely ignorant writers are of the actual organisation of the modern system of Credit, we may quote a sentence from Colonel Torrens, who was one of the influential sect who procured the enactment of the Bank Charter Act of 1844. He says,¹ "A Bill of Exchange may also pass from purchasers to vendors many times a day ; but no one of the successive transactions of which it is the medium can be finally closed until the last recipient has received in Coin or Bank Notes the amount it represents." A statement also which appears in Mill.

No doubt 200 years ago, as far as we are aware, the vast majority of bills were paid in Money or Bank Notes : but that has long ceased to be the case. At the present day probably not one bill in 100,000 is ever paid in Money or Bank Notes : but by other methods which we have now to describe.

Those who imagine that Bills and Notes at the present day are always paid in Money or Bank Notes have as much idea of the truth as those who know nothing of steam navigation beyond the little *Comet* of four-horse power which paddled down the Clyde in 1812, have of the triple expansion engines of the *Campania* : or as those who know nothing of a locomotive beyond Stephenson's Rocket have of the last new locomotive on the London and North Western Railway. The organisation and expansion of the System of Credit have developed *pari passu* with that of the steam engine.

The only real difficulty in the case, as has been frequently observed, is for lay readers and writers to understand that a Right of Action, a Promise to Pay, which is a Credit, or a Debt, is itself independent exchangeable Property or Merchandise, or a Chattel, quite distinct from the Money promised itself, and that it circulates in commerce by itself, exactly like Money.

But of course the Value of the Promise or Right of Action is the thing itself : and consequently if the thing itself is not forthcoming, the Right of Action has lost its Value. This consideration at once shows the Limit of Credit. Assuming the Credit to be, what is its best known form in this country, the Right to demand Money, it is quite clear that as long as a person has in his possession sufficient Money, or *what is held to be Equivalent to Money*, to discharge his Debt when it becomes due, the Credit has not been excessive.

¹ *The Principles and Practical Operation of Sir Robert Peel's Act of 1844 explained and defended*, p. 79.

The futile nature of the speculations of lay writers on this subject consists in the fact, that by the highly organized system of modern Credit, it is only an infinitesimal portion of Bills that are ever paid in Money at all: but they are paid in the **Equivalents** to Money.

The institution of Banks and Bankers who create Currency by means of their Credit, either in the form of Deposits or Notes, has enlarged the Limits of Credit at least a thousand-fold: but yet the principle of the Limit remains the same. Credit always has to be redeemed: and if this can be done the Credit has been sound. Hence, Credit is never excessive, whatever its absolute amount may be, as long as it always returns into itself.

On the Extinction of Obligations.

We have now to consider the various methods by which Obligations are extinguished. Credit being the Right to demand something to be **paid** or **done**: and the Debt being the **Duty** to **pay** or **do** that something: the Payment, or the Performance of the thing, fulfils, discharges, and extinguishes the Duty: as well as the Right. And thus the Obligation is absolutely annihilated and extinguished.

Commercial Credit in this country is always expressed to be payable in Money: and it is often supposed that Bills of Exchange are always paid in Money, or Bank Notes. But as has been shown in the preceding paragraph, that is a vital error.

There are other methods besides payment in Money by which Obligations are extinguished. And in this country the amount of Bills which are paid in Money is absolutely infinitesimal compared to those which are paid in other ways.

There are four different methods by which Obligations may be extinguished: these are—

1. By **Acceptilation**: or Release.
2. By **Payment** in Money.
3. By **Novation**: Renewal or Transfer.
4. By **Compensation**: or Set-off.

For which we must refer to the several articles under these heads.

DEPOSIT.

The word *Depositum* is one of that class of Latin words which in classical Latin meant a material thing, but which in modern Commerce, or Economics, means only an abstract Right.

A *Depositum* in Roman Law meant anything which was placed in the gratuitous charge, or custody, of some person, for the sole purpose of safe keeping, without the property in it passing to him, or his being allowed to use it in any way for his own profit or advantage, or even being allowed to retain as a security for a Debt due to him.

It is part of the duty of a London banker to take charge of his customer's plate, jewellery, and securities, if required to do so. This plate, jewellery, and securities so committed to his charge solely for safe custody, is what in Roman Law is called a *Depositum*.

The banker acquires no property in such a *Depositum*. He can make no use of it for his own profit or advantage; he receives no remuneration for keeping it, and he has no lien on it, if his customer becomes indebted to him; and he is bound to return it on demand (*Dig.* 16, 3, 1, 24, 45; 16, 3, 34).

So if a customer tied up a sum of money in a bag, and delivered it to his banker for the sole purpose of safe keeping, it would be a *Depositum*, and the banker would be bound to redeliver the specific bag of money to him on demand untouched. It is said that in the great crisis in America in 1893, customers withdrew their balances from their current accounts, which were *mutua* or *credita*, to the amount of £80,000,000, tied them up in bags, and redelivered them to their bankers to keep for them as *Deposita*, and then of course the bankers could not touch them.

If a banker were to use the money, jewellery, and securities placed with him as *Deposita* for his own profit and advantage, it would be a felony, and he would be liable to penal servitude, as too many bankers have found to their cost.

It is almost universally supposed by lay writers, that when a customer pays in money to his account with his banker it is a *Deposit*, and that the "Deposits" of a bank are the cash held by it. This, however, is a most vital error.

When a customer pays in money to his account with his banker in the ordinary way, he loses all property in it. The banker acquires the absolute property in it, and may use it in any way he pleases for

his own profit and advantage. Such money is not, therefore, a *Depositum*; it is a *Mutuum*, or a *Creditum*.

If the money so paid in were a *Depositum*, it would mean that the banker acquired no property in it; that the property in it remained with the customer who placed it in the banker's hands for pure safe keeping, and that he could demand back that specific sum of money at any time he pleased. But every person who thinks, knows that such ideas are erroneous.

The banker purchases the money absolutely, and in exchange for it he creates a Credit in his books in favour of his customer. That is, he issues a Right of Action against himself to his customer, entitling him to demand back an equivalent sum of money at any time he pleases. And it is this Right of Action, Credit, or Debt recorded in his books in his customer's favour which, in the technical language of modern banking, is termed a **Deposit**; that is, he buys the money by *creating* a Deposit.

So when a banker discounts or buys a Bill of Exchange from his customer, he buys the Right of Action from him exactly in the same way as he bought the money. He creates a Credit in his books in his favour; that is, he issues a Right of Action to him. This Right of Action, Credit, or Debt is the price he pays for the Bill. And this Right of Action, Credit, or Debt created to buy the bill is termed a Deposit, equally as the Right of Action created to purchase the money. Thus he buys a Right of Action, payable at a future time, by creating another Right of Action, payable on demand. The money and the bills are the banker's assets. The Deposits are the Rights of Action he has created to purchase his assets, or his Liabilities. Every advance a banker makes is done by creating a Deposit. His Depositors are those persons who have Rights of Action against him to pay their balances in money on demand. A Deposit is simply a Liability or a Banking Credit.

That this is the true meaning of the word Deposit is known to every banker, though it is an impenetrable mystery to lay writers. Thus, Mr. G. W. Norman said before the Committee of the House of Commons in 1840 (A. 1696): "By a banker's deposit, I mean a Credit in a banker's books; nothing more or less than that." And if lay writers would only look at the weekly accounts of the Bank of England, they would see the Deposits classed under the head of Liabilities, not Assets. In his message to Congress in 1836, President Jackson said: "These **Credits** in the books of some of the Western Banks usually called **Deposits**."

In Banking Language a Deposit and an Issue are the same.

In the technical language, then, of modern banking, a Deposit and an Issue are the same thing. A Deposit is simply a Credit in a banker's books. It is the evidence which a customer has of his Right of Action to demand a sum of money from the banker. As soon as the banker has created a Credit or Deposit in his books in favour of his customer, he has issued a Right of Action against himself.

The word Issue comes from *exitus*, a giving forth ; and, in Mercantile Law, to Issue an instrument is to deliver it to anyone so as to give him a Right of Action against the deliverer or issuer.

It in no way increases the banker's liability to write down this Right of Action, Credit, or Deposit on paper in the form of a Bank-note or a Cheque. Such documents are only made after the Credit or Deposit has been created or issued, and their sole purpose is to facilitate the transfer of the Right of Action or Deposit to someone else.

And as every advance a banker makes is done by creating and issuing a Right of Action against himself to his customer, and as a banker has an unlimited right of buying any amount of Debts or Obligations from his customers by creating as many of these Deposits, Rights of Action, or Issues as he pleases, it follows that *every banker has the right of Unlimited Issue.*

Bank-notes and Cheques, then, do not increase a banker's liabilities. The liability is created when the banker has entered the amount to his customer's Credit in his books.

The Note or the Cheque is merely a convenient method of transferring the pre-created Right of Action, or Debt, which has already been issued.

Deposits, then, instead of being Cash, or a part of the banker's Assets, as is so commonly supposed, are nothing but Rights of Action, Credits, or Debts, which the banker has created as the price to purchase the Cash and Bills, which figure in the account as his Assets. They are his Liabilities. And a sudden increase of Deposits is, therefore, nothing more than inflation of Credit, exactly similar to a sudden increase of Bank-notes. Deposits are nothing but Bank-notes in disguise.

As this error regarding the meaning of the word Deposit is almost universal among writers and speakers on banking, we may cite one conspicuous example of it.

Mr. John Torr, a Liverpool merchant, was questioned by Mr. Wilson before a Committee of the House of Commons on the Monetary Panic of 1858.

Q. 4939. "I believe I am correct in the fact that all the transactions of the banks in New York are published periodically, and at very short intervals, by the banking department?" "I believe they are published weekly."

Q. 4940. "These accounts, as they are published, show the circulation of notes, the amount of specie held by the banks, the amount of advances made by the banks, and all the items in great detail, do they not?" "They do."

Q. 4941. "Are you aware that during the last two or three years, while the circulation of notes had not increased at all, or had increased to the very smallest possible amount, the amount of advances, as shown by these accounts, had, as you have referred to, increased to a very enormous amount?" "Yes; I must apologise for the answer I gave. I meant the advances when I said the notes. I meant the *Liability* of the bank from its advances made on securities."

Q. 4942. Chairman (Mr. Cardwell): "The mere act of making an advance does not render a person liable. *Of course, the liability is the other way?*" "Yes."

Q. 4943. "Will you trace the process by which the banks increased their own liabilities by making advances to others?" "Looking at the securities which they held from other parties, by making advances to a number of merchants to a larger amount than usual, they felt that the indebtedness of these parties to them was more than prudent."

Q. 4944. Mr. Wilson: "Do you think that the banks had made undue and imprudent advances in the loan of their Capital and *Deposits?*" "I apprehend that they thought so."

Q. 4947. "But it would be either from *Deposits* or Capital that increased advances could be made by the banks?" "Certainly."

Q. 4948. "Therefore, if you are aware that increased advances were made to a large extent, it must have been either from an increase of subscribed Capital, or from an increase of Deposits?" "Yes; I apprehend so."

Mr. Cardwell and Mr. Wilson were considered to be among the ablest financiers of their day, and yet neither of them had the least knowledge of the true nature and mechanism of banking. Mr. Torr had a perception of the real nature of it, for he says that the banks had *increased* their liabilities by their advances. But he held

his knowledge so loosely, that he was easily shaken out of it, and gave in to Mr. Cardwell and Mr. Wilson. Neither of these gentlemen had the least idea of the nature and ordinary business of banking, because banks make all their advances by creating and issuing liabilities. This, however, seemed a paradox to Mr. Cardwell, who sneeringly asked the witness to explain how banks increased their own liabilities by making advances to others, which any bank clerk could have told him. Mr. Wilson asked him if the banks made imprudent advances out of their Capital and *Deposits*. Banks have no Deposits in the juridical meaning of the term. What they have are *Mutua*, or *Credita*. But they make all advances by creating Deposits; *i.e.* Credits, or Rights of Action. And thus all banks make advances by increasing their liabilities, which was so sore a puzzle to Mr. Cardwell.

This misconception of the meaning of the word Deposit leads to a somewhat amusing error, which is usually seen in the newspapers every half-year after the Joint Stock Banks publish their accounts. They give summaries of the accounts of the banks, which show that they have about £800,000,000 of Deposits. And these innocent writers evidently consider that these are Deposits of cash, and they hold up their hands in astonishment at the vast quantity of cash the banks hold, which they assume are the savings of the people.

Now, as no one supposes that there are more than £90,000,000 of gold coin in the country, it would somewhat puzzle these ingenious gentlemen to explain how there can be £800,000,000 of Deposits of cash in the banks. But any one conversant with banking would tell them that these £800,000,000 are not Deposits of cash, but they are mere creations of Credit, and that they are nothing more than Bank-notes in disguise.

DEPRECIATION AND DIMINUTION IN VALUE.

We must now observe the distinction between two expressions which, though often used indiscriminately, are essentially distinct.

An **Alteration in Value** of any commodity means that any Quantity of it which was considered equal in value to any Quantity of another commodity has undergone a change. If corn is at any time worth 40s. a quarter, and at another time is worth only 30s. a quarter, these two Quantities have undergone an Alteration in Value.

Depreciation means that it is not really of the Quality it professes to be.

Alteration in Value always refers to some *other* commodity with which it is compared. Depreciation is used in reference to itself; hence, Alteration in Value refers to External Quantity, Depreciation to Internal Quality, which, however, may affect its external relations.

If at any time an ounce of gold will exchange for fifteen ounces of silver, and if, in consequence of an increase in the quantity of silver, an ounce of gold becomes able to purchase thirty ounces of silver, then silver is said to have *fallen in value* with respect to gold, the quality of silver remaining exactly the same. Or if, while the quantity of silver remained the same, gold became so scarce that an ounce of gold would similarly purchase thirty ounces of silver, gold would be said to have *risen in value* with respect to silver. In either case the result is the same; there is an Alteration in Value, or a change in the exchangeable relation of the two metals, while each continues of exactly the same quality.

But if a piece of money, as a sovereign, which ought by law to contain a certain amount of pure gold, does not contain the amount it ought to; or if a shilling, which ought to contain a certain amount of pure silver, does not contain the amount it ought to, it is **Depreciated**; so also if a Bank-note, which professes to be of the value of five sovereigns, will only exchange for four sovereigns, it is **Depreciated**.

These distinctions are of great importance, though they are often overlooked. They are especially necessary to be observed in all discussions regarding the value of coins which retain the same name through a long series of ages. The pound of money in the days of William I. really meant a pound weight of silver bullion, and silver was the only money. Since then silver has greatly increased in quantity, and other things, such as gold, copper, and credit, are used as money as well, which have greatly tended to diminish the value of silver. It is said that silver has fallen to the twelfth part of its value in those times. But not only has the value of silver greatly **Diminished**, but also the coinage is greatly **Depreciated**. The shilling was then the twentieth part of a pound of silver bullion; it is now only the sixty-sixth part. Hence, not only is silver greatly *Diminished in Value*, but the coinage is also greatly *Depreciated*, and it is said that in consequence of these combined causes, the modern shilling is only of the thirty-sixth part of the value it was in the time of William I.

These causes affecting the value of coins which retain their names through long periods, may act in the same or in opposite directions. In the coinage of England, these two causes have acted in the same direction. But they may also act in opposite directions. A coinage may be greatly depreciated, *i.e.* reduced in weight, but, from the increased value of the material, it may retain its former value, or may be able to purchase as much as it did in its original state. It is sometimes alleged that this happened at Rome. The first coinage of Rome was of copper, and the metal was found in great abundance for a considerable time after the foundation of the city. The first measure of value was the *as*, which was a pound weight of copper. The *as* was subsequently, at the time of the second Punic War, reduced to the twelfth part of its weight. And some writers allege that in consequence of the great scarcity of the metal, it had increased in value so much that the depreciated coinage would purchase as much as the full pound of copper would originally. This may have been so or not, but it in no way affects the argument; it may very possibly have been so.

This is necessary to be observed in comparing prices at the present day with those of former times. It is necessary to compare the state of the coinage at the two periods.

These considerations greatly affect the public in the matter of public Debts. The State agrees, at a particular time, to pay a fixed quantity of bullion for ever, or for a long period of time, to its creditors. Now, even supposing that all other things remain the same, the Value of Money may vary greatly during long periods of time, either from the increased scarcity, or the increased abundance of the metal, and either the State or its Creditors may be grievously affected by these changes.

The public debt of England has not been sufficiently long in existence to be much affected by this last consideration, but it has been sensibly felt in perpetual leases granted by Corporations to their tenants several centuries ago to their tenants. In many cases, rents were fixed in the money of the period, and in consequence of the diminution in value of money, and the depreciation of the coinage since that time, the rents have fallen to a little more than a nominal amount at the present time. In other cases the rents were reserved, payable in the value of certain quantities of corn, and the far-seeing lessors who did this, have preserved their rents at a much higher value.

DISCOUNT.

Profits made by lending, *i.e.* selling (**Loan**) money for Debts, are made in two ways :—

1. When the person who sells the Money and buys the Debt agrees to defer receiving the profit until the end of the time agreed upon, it is called Interest (**Interest**).

The Debt is the price of the Money, and the Money is the price of the Debt.

2. The difference between the Money advanced and the Debt, or the profit, may be retained at the time of the purchase of the Debt. The profit is then termed **Discount**.

But Discount itself is of two kinds :—

(*a*) In the ordinary books of Algebra, it is said that Discount is where the profit is retained at the time of the purchase, and the sum paid for the Debt is such a sum as, improved at the given rate of Interest, should be equal to the full amount of the Debt at the end of the period of advance.

It is, therefore, the Present Value of the sum agreed upon at the given rate of Interest. This may be called Algebraical Discount. It is used by Insurance Offices in making advances, and in some other cases.

(*b*) But this kind of Discount is never used by bankers and dealers in money. In banking it is universally the custom to retain the full amount of the profit agreed upon at the time of purchasing the Debt.

Thus, if a banker discounts a bill for £100 for a year at 5 per cent., he deducts and retains the full £5 at the time of the purchase, and gives his customer a Credit for £95. That is, he creates a Right of Action, or Debt, against himself of £95 to purchase the Right to demand £100 at the end of the year.

As this method of Discount is invariably used by bankers and money-lenders, it may be termed **Banking Discount**.

The **Rate of Discount** is the ratio of the profit to the amount of the Debt made in some given time as the year.

To Discount a bill is to purchase the Right of Action, or Debt, by giving in exchange for it a certain sum of Money or Credit.

The profits made by Interest and Algebraical Discount are exactly equal. But Banking Discount is more profitable, because in Interest a profit of £5 is made on the actual advance of £100, and it is only made at the end of the year ; but in Discount, the same profit is made on the advance of the £95, and so it may be traded with at once.

So long as the Rate of Discount is low, there is not much difference between the profit made by Interest and Banking Discount. But as the Rate of Discount increases, the profits made increase at a very rapid ratio, as may easily be seen.

If a person "lends" £100 at 20 per cent. Interest, he advances £100, and at the end of the year receives £120, which is profit at the rate of 20 per cent.

If he discounts a bill for £100 at 20 per cent., he advances only £80, and at the end of the year receives £100, which is a profit of 25 per cent.

If he "lends" £100 at 50 per cent. Interest, he advances £100, and at the end of the year receives £150, which is profit at the rate of 50 per cent.

If he discounts a bill for £100 at 50 per cent., he advances only £50, and at the end of the year receives £100, which is a profit of 100 per cent.

So discounting a bill for £100 at 60 per cent. is a profit of 150 per cent.

If a person lends £100 at 100 per cent. Interest, he advances £100, and at the end of the year receives £200, which is a profit of 100 per cent.

If he discounted a bill for £100 at 100 per cent., he would advance Nothing, and at the end of the year he would receive £100, or his profit would be Infinite.

It would be out of place here to investigate the whole Theory of Banking Discount, but we have given a full exposition of it in our *Theory and Practice of Banking and Elements of Economics*.

The Athenian bankers seem to have invented the method of Discount which stirred the soul of Plutarch to phrenzy. In his violent tirade against money lending, he is particularly severe against the invention of discounting:—"It is said that hares bring forth and nourish their young at the same time that they conceive again, but the debts of these scoundrels and savages bring forth before they conceive! For they give, and immediately demand back, and take away their money at the time they place it out, and they place out at interest what they receive as interest. The Messenians have a proverb:—

‘There is a Pylos before Pylos, and yet another Pylos still’;
but it may be said to the usurers,

There is a Profit before Profit, and yet another Profit still.

“And then, forsooth, they laugh at philosophers who say that ‘nothing can come from nothing.’”

DISTRIBUTION.

Distribution is one of the fundamental terms in the definition of Economics, framed by the Economists as an alternative definition to that of Commerce, or Exchanges.

Producers, as defined by the Economists, were those persons who obtained the raw produce from the earth and brought it into commerce. But this raw produce was generally not fit to be used at once, and it had to undergo a number of changes by manufacturing and transport from place to place before it was finally taken out of commerce for use and enjoyment by the ultimate consumer, or purchaser. All these intermediate processes between the first production and the ultimate consumption, or purchase, of the object were termed Distribution by the Economists, and the persons who were engaged in them were termed Distributors. Thus the term Distribution, as used by the Economists, was restricted to Distribution by Exchanges. Smith does not entitle a portion of his work as Distribution, but his use of the word is the same as that of the Economists.

But J. S. Mill has entirely destroyed the scientific unity of the subject. His second Book is on Distribution. But under this term he treats of Communism, St. Simonianism, Fourierism, Inheritance, Slavery, Peasant Proprietors, Metayers, Cottiers. Now what have these subjects got to do with Exchanges or Commerce? Absolutely nothing. The discussions may be interesting in themselves, but what place do they hold in the principles and mechanism of commerce? By introducing these subjects as he has done, Mill entirely destroys the scientific unity of the subject; and if he thought it expedient to discuss them, they ought to have been relegated to quite a different place.

DOCK WARRANT.

A Dock Warrant is a *Jus in rem*. When persons deposit goods in a Dock Warehouse, the Dockmaster gives them a written receipt for the goods, which is called a Dock Warrant. This document is transferable by indorsment, like a Bill of Lading, and the indorsee acquires the property in the goods, and may claim them from the Dockmaster. This Warrant is termed in law a Document of Title.

DRAFT.

A written order from one person to another who **Holds** a sum of money as a *Depositum*, as the Trustee, Bailee, Agent, or Servant of the Drawer, to pay a sum of money to another person, is termed a **Draft**, or Order for the payment of money.

Bills of Exchange and Drafts are of exactly the same form and external appearance. There is, however, an essential distinction between them both in Law and Economics. This essential distinction consists in the difference in the relations between the parties to the instrument.

In a Bill of Exchange the Drawee is, or appears to be, the Debtor to the Drawer. The property in the money drawn for resides in the Drawee: the Drawer is his Creditor, and he has only a Right of Action to compel the Drawee to pay a sum of money, but he has no right or title to any specific money in the Drawee's possession.

In a Draft, the property in the money resides in the Drawer. The Drawee merely holds it as a *Depositum*; it is merely entrusted to him for custody and safe keeping. He has possession of it only as the Trustee, Bailee, Agent, or Servant of the Drawer, and if he appropriated it to his own use it would be a felony.

Hence, in such a case, when the Drawer draws a Draft, or Order for the payment of money on his servant, and delivers it to another person, he is not transferring a Right of Action, or Debt due to him; he is directing his servant to deliver to a certain person a portion of his own money which is in the custody of his servant.

Also, the holder of the fund is not personally liable on such a Draft, or Order; he is only bound to pay it if he has money of the Drawer's in his possession. Consequently such a Draft, or Order, is not a Credit, or a Personal Obligation; it is a Title to an undefined portion of some specific money.

Such an Order is not a Bill of Exchange; it is contrary to the fundamental nature of a Bill of Exchange.

If a Bank has several branches, Orders granted by the head office on the branches, or *vice versâ*, are not Bills of Exchange, but Drafts.

Thus, every Bill of Exchange is an Order to pay money; but every Order to pay money is not a Bill of Exchange. The word Order includes both Bills and Drafts.

The distinction between Bills and Drafts, both in Law and Economics, is most important.

Drafts, like Bills of Lading and Dock Warrants, always arise out

of a Bailment or Deposit of money, and consequently cannot exceed in quantity the money deposited. The fund in charge of the Treasurer is withdrawn from circulation, and locked up in the vaults of the Treasury, and the Drafts drawn upon it can never be in circulation as well as the money they relate to. Hence such Drafts do not increase the Currency, or Circulating Medium, and have no effect on prices.

But a merchant can issue Bills or Notes far exceeding the money he may possess at any given time, because he is not bound to have any money in reserve at the time he issues them; he is only bound to have money to meet them on a given day, even if he does pay them in money. But, as a matter of fact, in modern commerce, Bills are very rarely indeed paid in money, but by other methods (**Compensation—Novation**). The practical result is that the Bills and Notes and other forms of Credit in circulation exceed about 100 times the quantity of money they are supposed to represent. Bills and Notes form part of the Currency, or Circulating Medium, and affect prices exactly like an equal amount of gold.

ESTATE.

The word **Estate** is one of those in English which, by a corruption of language, are supposed to mean things, but which in reality mean abstract Rights.

Thus, when a nobleman or gentleman is said to own a large **Estate**, it is popularly supposed that he has the Property in a large quantity of Land, and the Land is supposed to be his Estate. That, however, is a complete error. In the first place, as Mr. Williams says:—"The first thing the student has to do, is to get rid of the idea of absolute ownership. Such an idea is quite unknown to English Law. No man is in law the absolute owner of lands. He can only hold an **Estate** in them."

Absolute Property in land is termed allodial. In the Roman Empire, the owners of land held it in absolute property or *Dominium*, without any superior. And before the Conquest, this was the case in England, as well as in other countries. Wherever Roman Law prevailed, the land was equally divided among a man's children at his death, the same as his movable goods. This was the origin of the small properties in France, which so many believe was the consequence of the French Revolution. Whereas the fact is that this law was inherited from the Roman Empire, and applied

to all *roturier* land. But all feudal land was taken out of its operation, and subjected to the law of primogeniture. What the French Revolution did was to re-establish the law of equal partition in regard to feudal land. The law of equal division also prevailed in England, and it is supposed that the multitudinous hedgerows, which in many parts of the country used to divide the land into so many minute patches, but which greatly disappeared before improvements in agriculture, were the consequences of this law.

Feudal tenure had, to a certain extent, been introduced into England before the Conquest. But William I. assumed the absolute property of all the lands in England, except Church lands and the county of Kent, for the Crown. He made a composition with the men of Kent to maintain their ancient customs, so that the land in Kent remains, as formerly, divisible among the family. This is called the custom, or law, of Gavelkind; but most of the land in Kent has been disgavelled by various Acts of Parliament.

The Conqueror, then, being the sole absolute proprietor of the land in England, except as above, granted out to his followers certain Rights of use and enjoyment in certain lands, and those Rights were termed **Estates**.

But the persons to whom these Rights were granted were bound to render certain services in return, and they were never called owners, or proprietors, but only **Tenants**. They were only permitted to enjoy the use and profits of these lands on the express condition of rendering those services to the Crown, which, if they failed to do, they were as strictly liable to forfeiture as a modern tenant or farmer for non-payment of rent. And at first these Estates were neither alienable nor transmissible by will, but were strictly life tenancies, which reverted to the Crown at the death of the tenant.

Thus Littleton speaks of Tenants in fee simple, Tenants for life, Tenants at will, Tenants by copy, Tenants for terms of years, Tenants in common, Tenants by grand serjeanty; and the index, or tabula, says: "The first book is of Estates which men have in lands and tenements"; and in p. 1 he says: "For these words (his heirs) make the Estate of inheritance." So in B. III., ch. 2: "Of Estates upon condition," he says, "estates which men have in lands or tenements upon condition, are of two sorts," and so on in many passages. Littleton would never have dreamt of applying the word Estate to the land itself.

So Bacon, says: "Property of land by conveyance is first distributed into Estates for years, for life, in tail, and fee

simple. These Estates are created by word, by writing, or by record."

An Estate is, therefore, always a Right of an inferior order to Property. It in reality means a **Lease**, as Bacon says: "For Estates for years, which are commonly called **Leases** for years. Such Interests or Estates in land were always given as the fee or reward for services rendered to the Crown." So Bacon also says: "The last and greatest Estate of lands is fee simple, and beyond this there is none of the former for lives, years, or entails, but beyond them is fee simple. For it is the greatest, last, and uttermost degree of **Estates** in land."

The true meaning of Estate, therefore, is a Lease or Right to use a thing derived from a higher power, for which some service is given, which is *feudal* property; and an Estate in fee simple, means a perpetual lease of lands or tenements, and is in strictness only applicable to land.

The true meaning of the word Estate is also shown in the *Tempest*, where Iris says:—

"A contract of true love to celebrate,
And some donation freely to *Estate*,
On the blessed lovers."

So *Ægeus*, in *Midsummer Night's Dream*, says:—

"And all my Right of her,
I do *Estate* unto Demetrius."

So Oliver, in *As You Like It*, says: "All the revenue that was old Sir Rowland's will I *Estate* upon you."

EXCHANGE.

An **Exchange** in commerce is when a person pays a Debt he owes to a Creditor by transferring to him a Debt due to him from someone else.

It is a *Delegatio*, or one form of a *Novatio*.

Thus, where a person pays his Creditor by a Bank-note or by a Cheque on his banker, or by drawing a Bill of Exchange on another person, it is an **Exchange**.

Two passengers are travelling in an omnibus. The fare is sixpence. One passenger pays the conductor a shilling; the conductor is then indebted to that passenger in sixpence. Another passenger has a sixpence in his hand ready to pay his fare. The conductor, by a nod, tells him to give the sixpence to the first passenger. By this operation both Debts are paid. The Debt of the conductor to

the first passenger, and the Debt of the second passenger to the conductor, are paid by one operation. The whole transaction is an **Exchange**.

Out of these tiny germs is developed the whole vast and complicated system of the Foreign Exchanges.

Three parties and two Debts are thus necessary to an **Exchange**.

The Exchanges is that branch of Commerce which treats of the remission and settlement of Debts between parties living in different places either within or beyond the limits of the same country, and of the Exchange of the Money of one country for that of another.

The State of the Exchanges between any two places or countries depends upon two distinct things :—

1. The State of the Moneys of the two places.
2. The State of the Commercial Dealings between the two places.

The State of the Exchanges, which depends on the State of the Moneys of the two places, is called the **Nominal Exchange**.

The State of the Exchanges, which depends on the State of Commercial Dealings between the two places, is called the **Real**, or the **Commercial Exchange**.

On the Nominal Exchange.

For the due understanding of the Exchanges, we may refer our readers back to the fundamental principles of Bullion and Coin in a previous article.

Suppose that the Coinages of two countries are made of the same metal, and the Coinage of one country is taken as the standard, then the Quantity of the Coin of the **other** country, which contains exactly the same Quantity of pure metal, is called the **Par of Exchange** between the two countries.

Suppose that the Exchanges between England and France were estimated in gold. There is, as near as possible, one-fourth more pure gold in an English sovereign than in a French 20-franc piece.

If the English sovereign were taken as the standard, it would be equal to 1.25 of a 20-franc piece, and 1.25 would be the Par of Exchange between England and France.

The Exchanges between England and France are, however, not estimated in gold, but in silver. Moreover, the English sovereign is not exactly 1.25 of a 20-franc gold piece. Accordingly, 25.21 was usually considered as the Par of Exchange between England and France when gold was fixed at the ratio of 1 to 15½ to silver, which ratio is now only maintained by the French Mint being closed to the free coinage of silver for the public.

There can be no Fixed Par of Exchange between Countries which use Different Metals as their Legal Standard.

There can only be a Real Par of Exchange between countries when they use the **Same Metal** as their **Legal Standard**.

There can be no fixed Par of Exchange between countries which use different metals, such as gold and silver, for their Legal Standard. The relative market value of the two metals is constantly varying from causes entirely beyond the control of any law. It has already been shown that the value of the coins, when issued in unlimited quantities, strictly follows the market value of the metals. It is no more possible to have a fixed price of one in terms of the other, than to have a fixed legal price of corn or meat or any other commodity. If there is to be a fixed price of one in terms of the other, the coin whose value is to be fixed must be strictly limited in quantity. Thus, at the present time in France five-franc pieces are maintained at the ratio of $15\frac{1}{2}$ to 1 to gold, because the French mints are closed to the free coinage of silver. If silver were coined in France in unlimited quantities, the value of the five-franc pieces would fall to the ratio of about 35 to 1 to gold. So in England the value of shillings is maintained by strictly limiting their quantity. The artificial value of shillings to gold is 20 to 1, but if shillings were freely coined, their value would be about 38 or 40 to 1 to gold. So the Indian Government has recently closed its mints to the coinage of silver, to prevent the further fall in the value of the rupee. Every Government which uses gold as the Legal Standard and silver coin as subsidiary, allows gold to be coined in unlimited quantities, but restrains the issue of silver within its own discretion.

In 1797, when the Bank of England stopped payment, the House of Lords appointed a Committee to investigate the subject. The Committee, among other things, wished to ascertain the Par of Exchange between London and Hamburg, and they examined several merchants upon the question. But the merchants were quite unable to agree among themselves what the true Par of Exchange between the two places was, and the Committee reported that they were unable to come to a satisfactory conclusion on the point.

There cannot, in the nature of things, be any true or fixed Par of Exchange between England and any country which uses a Silver Standard. It is only possible to say that such is the *usual Rate of Exchange* between them. Hence, when it is said that 25.21 francs is the Par of Exchange between England and France, it only means

that such was reckoned as the usual Rate of Exchange between them before the recent great disturbance in the relative value of the two metals. And even the best authorities differed by several centimes. And between such countries it is sometimes impossible to decide certainly which way the Exchange is, unless the difference exceeds a certain amount.

On the Effects of a Depreciated Coinage on the Exchanges.

Coins may circulate in their own country at their full nominal value, after they have lost a good deal of their legal weight by wear and tear, because persons in general are not very rigorous in weighing every coin they receive.

But when they are exchanged for bullion, or for the coins of a foreign country, they are always weighed and exchanged weight for weight. If, therefore, for any reason whatever, the English coins have become degraded, worn, or clipped, and so lost their proper weight, they will evidently not buy so much bullion or full-weighted francs as if they were of their full weight.

If English sovereigns were in this depreciated state, they might perhaps only purchase 24 francs instead of 25·21 francs. This would be called a **Fall** in the Foreign Exchanges.

Or, if an English merchant were obliged to pay a Debt of 2,521 francs in Paris, he would have to give *more* than £100 to purchase them. This would be called a **Rise** in the Foreign Exchanges, and the Exchange would be said to be so much **Against** England by the amount of the difference.

When English Coin is used to purchase French Coin, it may be looked at in two points of view:—

1. A Fixed amount of English Coin may be used to purchase an **Uncertain** amount of French Coin.
2. An **Uncertain** amount of English Coin may be used to purchase a **Fixed** amount of French Coin.

In the first point of view, a Fixed amount of depreciated English Coin will buy a **Less** amount of French Coin.

In the second point of view, it will require a **Greater** amount of depreciated English Coin to purchase a Fixed amount of French Coin.

Hence, when a Depreciated Coinage is said to produce a Fall in the Foreign Exchanges, it means that a Fixed amount of English Coin will purchase a Less amount of Foreign Coin.

When a Depreciated Coinage is said to produce a Rise in the

Foreign Exchanges, it means that it requires a Greater amount of English Coin to purchase a Fixed amount of Foreign Coin.

A clear understanding of these expressions will prevent any confusion arising when they are used indiscriminately, as they often are in discussions on the Exchanges. They are not contradictory, as they might appear to be; they only refer to two different methods of estimating the Coinage.

It is evident that the adverse state of the Exchanges will continue so long as the Depreciation of the Coinage exists, and that a restoration of the Home Coinage to its proper state will at once rectify the Exchanges.

It is also evident that a Depreciation of the Coinage by a Debasement of its Purity will produce exactly the same effects, because in all cases it is the quantity of pure metal which is regarded, and this is equally diminished by a degraded state of the coinage, or by a Debasement of its purity.

If the Coinage is in a Depreciated State, to determine whether the Exchange is Favourable, at Par, or Adverse.

When the English Coinage is at its full legal weight, £100 in sovereigns will purchase 2521 French silver francs.

Suppose that the Coinage became Depreciated, so that the Market Price of Bullion rises to £4 3s., then the Market Price of £100 of full-weighted Coin is £106 11s. 7½d.

Suppose that the Exchange on Paris is 23·80, or that £100 of the current coin will purchase 2380 francs, then £106 11s. 7½d. will purchase 2636·63 francs.

But as the Par at the Mint Price is 2521 francs, it is evident that the Difference between 2521 francs and 2536·63 francs, or 15·63 francs, is the extent to which the Real Exchange is in favour of England.

It is also easy to see how much the exchange is depressed, because £100 ought to purchase 2536·63 francs, whereas they will only purchase 2380 francs. Consequently, the Exchange is depressed by 206·63 francs, or the 100 sovereigns are deficient by that amount of their legal weight, and this will be found to tally with the Rise of their Market Price above their Mint Price.

Hence a Depreciated Coinage necessarily produces a Rise of the Market Price of Bullion above the Mint Price, and a Fall in the Foreign Exchanges below Par.

Because it will require a Greater amount of the Current Coin to

buy a Fixed amount of Bullion, and a Fixed amount of the Current Coin will buy a Less amount of Foreign Coin.

Thus a Rise in the Market Price of Bullion above the Mint Price, and a Fall of the Foreign Exchanges below Par, **Proves and Measures the Depreciation** of the English Coinage.

Hence we have the following Rules :—

1. *Find the Market Price of Bullion in London compared to the Mint Price.*

2. *Multiply the Market Price so found by the Rate of Exchange.*

Then the Exchange is Favourable, at Par, or Adverse, according as the result is Above, At, or Below Par.

And the Depression of the Exchange, caused by the Depreciation of the Coinage, is the Difference between the Sum so expressed in the Mint and Market Prices, multiplied by the Rate of Exchange.

In the excellent state in which our Coinage now is, the question of the Nominal Exchange is of little importance. But it is impossible to understand the history of the Currency without it, and it is essential with regard to all Foreign Countries which use an Inconvertible and Depreciated Paper Money.

On the Real or Commercial Exchange.

We have now to explain the mechanism of the **Real** or the **Commercial** Exchange.

Suppose that A in London is Creditor to B, and Debtor to B¹, both in Edinburgh, in equal amounts, then to settle these Debts it would be necessary for B in Edinburgh to send the money to A in London, and for A in London to send an equal amount of money to B¹ in Edinburgh. This would require two transmissions of money between London and Edinburgh, at some expense.

The business may be settled much more easily and cheaply if A in London sends to B¹, his Creditor in Edinburgh, an Order for the money upon B, his Debtor in Edinburgh. By this means both Debts are settled and discharged by B paying over to B¹ the money he owes to A ; that is, by the simple transfer of the money from B to B¹ in the same place, instead of by two transmissions of money between London and Edinburgh. This order is termed a Bill of Exchange, and the operation is exactly similar to a person paying his Creditor by a Cheque on his banker, or the case of the passengers in the omnibus described above.

Thus an "Exchange," or a Delegation, requires at least *three* parties and *two* Debts.

On an Exchange with Four Parties.

The above is the simplest form of an Exchange. But the course of trade gives rise to much more complicated transactions.

In the above case, A fulfils two characters, or *personæ*. He is Creditor to one party, and Debtor to another in Edinburgh.

But in the "Exchanges," it more usually happens that there are *four* parties.

Suppose that A in London is Creditor to B in Edinburgh, and that B¹ in Edinburgh is Creditor to A¹ in London, then to settle these Debts two transmissions of money between London and Edinburgh are necessary.

But suppose that A¹ in London goes to A and pays him the money he owes to B¹ in Edinburgh, and buys from him the Debt he has against B in Edinburgh. He then sends this order to his own Creditor B¹ in Edinburgh, then B¹ presents the order to B, and receives from him the money he owes to A¹. By this means, both these Debts are settled by a local transfer in London and in Edinburgh, and the expense of the transmissions of money between these places is saved.

When the sum total of the Debts between London and Edinburgh are exactly equal, they may all be paid and discharged by means of these "Exchanges," Novations, or Delegations, or local transfers, without the aid of a single coin.

The Exchanges are then said to be at **Par**.

On the Time Par of Exchange.

Suppose, however, that the Debts between London and Edinburgh are not equal, and that Edinburgh has to send more money to London than it has to receive from London, then the Demand for Bills is greater than the Supply.

But as it is cheaper to send a Bill than the money, those who are bound to send Money will bid against each other for the Bills in the market, as for any other merchandise, and the Price of Bills will rise, or a **Premium** will have to be paid for a Bill on London.

Thus, when Bills are at a Premium on any place, it shows that the Exchanges at that place are adverse.

London is the great centre of Commerce. It is the seat of Government, to which the revenue is remitted from all parts of the country. The great families from all parts of the country go to

reside there, and their revenues must be remitted to them there. Hence there is always a much greater amount of Money seeking to flow to London from the country than the contrary. Consequently, the Demand for Bills on London in the country is always greater than the supply, and, therefore, Inland Bills on London are always at a Premium.

This Premium is computed by **Time**. It is an essential part of the business of a banker to give these Bills. Within a comparatively recent time, a Bill on London at sight was charged 40 days' interest in Edinburgh. But since the introduction of railways, this has been reduced to four days. If a person in Edinburgh wants a Bill at sight on London, he has to pay 1s. per cent., or four days' interest.

This is termed the **Time Par** of Exchange between Edinburgh and London. There is a similar Premium, or Time Par of Exchange, between all other towns in the country and London. This is termed **Inland Exchange**.

It appears from this that when in any place the Demand for Bills on any other place is greater than the Supply, and, therefore, when *Bills rise to a Premium*, the Exchanges are **Adverse** to the first place, because it has more Money to pay than to receive.

But when the Supply of Bills is greater than the Demand, the reverse takes place. *Bills fall to a Discount*, and the Exchange is *favourable* to the first place, because it has more Money to receive than to pay.

It must be observed, however, that the interests of Buyers and Sellers of Bills are opposite. If the Exchange is unfavourable to the Buyers of Bills, or those who wish to send Money, it is equally favourable to the Sellers of Bills, or those who have to receive Money.

Buyers of Bills are also termed **Remitters**, and Sellers of Bills are also termed **Drawers**.

On Foreign Exchange.

The principles of Foreign Exchange are exactly the same as those of Inland Exchange. But there is very considerably more complication in the details, because different nations use different metals as their Legal Standard, and different coinages.

In Exchange between two foreign places and of different moneys, the money of one place is always taken as **Fixed**, and the Exchange

is always reckoned in the **Variable** Quantity of the money of the other place which is given for it.

The former is termed the **Fixed**, or **Certain**, Price, and the latter the **Variable**, or **Uncertain**, Price.

When any place is taken as the centre, if the money of the place is the **Fixed** Price, it is said to **Receive** the **Variable** Price.

But when the money of the place is the **Variable** Price, it is said to **Give** the **Variable** Price.

The Foreign Exchanges are enormously complicated, because every centre of Exchange **Receives** the Variable Price from some places, and **Gives** the Variable Price to others.

Between London and Paris the £ is the Fixed Price, and the Exchange is reckoned in the variable amount of francs and centimes given for it.

On the contrary, between London and Spain the dollar is the Fixed Price, and the Exchange is reckoned in the variable number of pence given for it.

Thus London receives from Paris so many francs and centimes for the £1; on the contrary, London gives to Spain so many pence for the dollar.

In the quotations of the Rates of Exchange, it is usual to omit the Fixed Price and to state only the Variable Price, and then that sum is termed the **Rate** or **Course** of **Exchange**.

London **Receives** the Variable Price from Amsterdam, Austria, Belgium, France, Germany, Italy, and Switzerland.

London **Gives** the Variable Price to Calcutta, Gibraltar, Lisbon, New York, Rio Janeiro, St. Petersburg, and Spain.

On the Effects of the Exchanges being Favourable or Adverse to London.

As a general rule, when the Exchanges are favourable to London, Foreign Bills fall to a **Discount**, because London has more money to receive than to pay.

When the Exchanges are **Adverse** to London, Foreign Bills rise to a **Premium**, because London has more money to pay than to receive.

But in consequence of the **Opposite** modes of reckoning the Exchanges in London on different countries, the very same effects will have to be expressed in **Opposite** terms, according as London **Receives** or **Gives** the Variable Price.

*Exchange between London and Places from which it Receives
the Variable Price.*

If the Exchange of London on Paris is favourable to London, and, therefore, the supply of Bills greater than the demand, Bills fall to a Discount, and consequently the Rate of Exchange will rise above Par—that is, £1 will purchase **More** francs and centimes than the Par.

But if the Exchange is against London, the demand for bills is greater than the supply, and Bills will rise to a Premium, and, therefore, £1 will purchase **Fewer** francs and centimes, and the Exchange will fall below Par.

And the same is true with respect to all other places from which London Receives the Variable Price.

*Exchange between London and Places to which London Gives
the Variable Price.*

But of course the contrary takes place between London and all places **to** which it **Gives** the Variable Price.

Thus between London and Spain, when Exchange is favourable to London, she will give **Fewer** pence to purchase the dollar, or the Exchange will fall *below* Par.

If the Exchange between London and Spain is against London, Bills rise to a Premium, and London must **Give** more pence to purchase the Dollar, or the Exchange will rise above Par.

And the same is manifestly true with respect to all places **to** which London **Gives** the Variable Price.

Hence, when the Rate of Exchange between London and any other place varies from Par, in order to determine whether the Exchange is Favourable or Adverse, it is always necessary to consider whether London Gives the Variable Price to, or Receives the Variable Price from, that place.

The general principle, of course, is always true. When the Exchange is favourable to London, Bills in London on other places fall to a Discount; when the Exchange is adverse to London, Bills on other places rise to a Premium; but as London Gives the Variable Prices to some places and Receives it from others, the same real state of the Exchanges requires opposite expressions in these opposite cases. But it is exactly the same with every centre of Exchanges; they each give the Variable Price to some places, and

Receive it from others. Hence the calculation of the Exchanges is a matter of the most extreme complexity, and requires no little of the genius of the calculating boy.

On the Limits of the Variations of the Exchanges.

When the debts to be exchanged between any two places are equal, the demand and supply of Bills at each place are exactly equal, and the Exchanges are at Par, because there is no money to be remitted from either side.

But if one place has to send more money than it has to receive, the demand for Bills will cause them to rise to a Premium.

It is the duty of the debtor to place the money on the spot where the debt is due at his own risk and expense. Consequently, as it is cheaper to send a Bill by post than to send the cash, with all the expenses of freight and insurance to pay, he would rather give a little more than the nominal value of the Bill, in order to save the expense of sending the specie.

But he will not give more than the cost of sending the specie, because if the price of the Bills were higher than that, it would be cheaper to send the specie itself.

Hence the cost of sending the specie is a **Superior Limit** to the variations of the real Exchange.

But the reverse case may also happen; the supply of Bills in London on Paris may exceed the demand. In that case London has more money to receive than to pay. The price of Bills will consequently fall below Par. But, for the same reason, the cost of transmitting specie will be an **Inferior Limit**, below which the price will not fall.

Hence the Limits of the Variations of the Exchanges are confined to **Twice** the cost of sending specie between the two places.

The Limits of the Variations of the Exchanges between two places are termed **Specie Points**, because when the Rates of Exchange have a tendency to exceed them, specie may be expected to flow in or out, as the case may be.

It must be observed, however, that these Limits of the Variations of the Exchanges only apply to Bills payable at once, and to considerable periods. During short periods, and for Bills which have some time to run, the fluctuations of the Exchange may, from a variety of causes, greatly exceed these limits.

On Inconvertible Paper Money.

The above considerations affect coinages of gold and silver. But in modern times a new species of money has come into use, and nearly every country has had recourse to it in times of public difficulty, and that is **Paper Money**.

While Paper is convertible—*i.e.*, while the holder of it can compel the issuer to give gold for it on demand—it is evident that it cannot circulate at a discount, because, if it fell to a discount, the holders would at once go and demand gold for it.

In quiet and ordinary times a bank can keep in circulation several times the amount of the specie it is obliged to retain in Notes or Bank Credits. As has been shown, banking profits can only be made by creating and issuing Credit in excess of specie. And as long as there is public confidence that the issuers can redeem this Credit on demand, the Credit circulates and produces in all respects identically the same effects as an equal amount of gold.

But suppose that some great calamity happens, such as a fear of invasion, this confidence will vanish, and numerous persons would demand payment of their Credits in gold.

Under the circumstances, and with the enormous masses of Paper in circulation in modern times, every country in Europe has been obliged to suspend payments in cash, and to give an artificial value to the Paper by receiving it in payment of taxes, &c., at its nominal value in specie, and to make it legal tender.

When this is done, Paper Money becomes in all respects equivalent to a new standard, just as much as gold and silver, and its value is affected by exactly the same principles as affect the value of gold and silver.

Under the old system of attempting to fix the value of gold relatively to silver, there was no power of convertibility of one metal into the other, similar to the convertibility of the Bank-note. If silver fell to a discount as compared with gold, no one could demand as a right to have his silver exchanged for gold; consequently the inevitable result of a considerable change in quantity or the demand for either metal was a change in their relative value. In 1794 gold rose to 84*s.*, if purchased with *silver* bullion; but if the silver coin had been convertible into gold, like a Bank-note, this difference could never have arisen, any more than a Bank-note, convertible into coin, can circulate at a discount as compared with coin.

Now Paper Money, when issued as a substantive coinage, follows

exactly the same rules. If only the usual quantity of it be issued—*i.e.*, no greater quantity than would have been issued if it were convertible into gold—it will continue to circulate at its Par value. But if these issues be increased in quantity, and if the natural corrective of excessive issues be taken away, namely, payment in cash on demand, exactly the same result follows as attends a greatly increased quantity of silver, and it falls to a Discount.

Lord King's Law of Paper Money.

When either of two metals used as a coinage becomes greatly increased in quantity, it becomes diminished in value as compared with the other; and if gold and silver, not being convertible, are compelled by law to circulate at a fixed ratio, in virtue of Gresham's law, the one which is underrated invariably disappears from circulation; it is either hoarded or it is exported to foreign countries, where it may exchange for its true value.

When one metal diminishes in value with respect to the other, it is not *Depreciation*, because it has a general value in the market of the world. But when Paper is used, which has no general value in the market of the world, but merely a local value, and it becomes excessive, it cannot be exported, because it has only a local, and not a general, value. It falls to a Discount as compared with coin, or coin is said to rise to a premium, and in this case it is **Depreciation**, because it professes to be equal in value to coin, and it is not so.

If it is attempted to maintain a fixed ratio between Paper Money and Coin after the Paper has fallen to a Discount, exactly the same result follows as takes place when Coin of inferior Value is attempted to be made to circulate at par with Coin of superior Value. The underrated Coin is all hoarded or exported. It entirely disappears from circulation, and nothing but Paper remains. As the quantity of Paper increases, it falls in Value. All Prices rise, the Foreign Exchanges fall, and all the Foreign Trade of the country is deranged.

A few years after the Bank of England suspended Cash Payments in 1797, the Price of Bullion rose, and the Foreign Exchanges fell, deranging the whole course of the Foreign Trade. Some able writers, the most conspicuous of whom was Lord King, maintained that this was due to the Depreciation of the Bank-note. Strong interests contested this doctrine. The Bank contested it because it found it profitable to issue as much Paper as possible; merchants contested it because they were afraid that their accommodation

would be restricted. After a short time, the value of the Bank-note improved, and the question slumbered.

In 1809 the same phenomena recurred, in a much more aggravated form, and gave rise to the appointment of the celebrated Bullion Committee. All the witnesses before this Committee, except one, maintained that it was not the Bank-note which had fallen, but Gold which had risen.

The Report, drawn up by Huskisson, Horner, and Thornton, entirely disproved this assertion, and showed that the Rise of the Market Price of Gold, and the Fall in the Foreign Exchanges, was entirely due to the Depreciation of the Bank-note from Excessive quantity, and it recommended a diminution of its Issues, so as to restore the value of the Bank-note.

Resolutions in accordance with the Report were moved by Horner. It was proved that there were two prices in common use, a Paper Price and a Money Price, and that a £1 Bank-note and 7s. were commonly given for a guinea. Nevertheless, under the influence of party passion, the House of Commons voted that, in public estimation, a guinea was equal to a £1 Bank-note and 1s., or that $27 = 21$. Freed by this vote from all control, the Bank made more extravagant issues than ever, so that in 1815 the Bank-note was only worth 14s. 6d.

However, the doctrines of the Bullion Report gradually convinced the Mercantile world, and in 1819 they had scarcely an opponent.

Lord King's Law of Paper Money is this:—

A Rise of the Paper, or Market, Price of Bullion above the Mint Price, and a Fall of the Foreign Exchange below the Limits of the Real Exchange, is the Proof and the Measure of the Depreciation of the Paper Money.

This principle is so universally admitted now, and is so perfectly evident, that there is no use in wasting more words to prove it.

It shows that Paper Money must always be restrained within certain strict Limits to maintain a Par Value with Gold. But if this be duly done, a certain amount of Inconvertible Paper Money may circulate along with specie at Par.

If the Bank of England had taken proper measures for controlling and limiting its Issues, its Notes might have circulated at Par with Gold.

In 1797, when the Bank Suspension Act was passed, the Banks in Edinburgh held a public meeting, attended by the authorities of the town, and gave notice that they should henceforth refuse to cash their Notes. This refusal was continued during the whole of the

war. But from the judicious measures taken, their Notes continued to circulate at Par with Bank of England paper.

In 1874 the Inconvertible Notes of the Bank of France circulated at Par with Coin, because they were carefully limited.

The doctrines of the Bullion Report lay down the principles by which all Credit and Paper Currency, whether Convertible or Inconvertible, must be regulated, namely, a strict attention to the Price of Bullion, and the State of the Foreign Exchanges.

The demonstration of the Bullion Report was, in course of time, universally accepted by the Banking and Mercantile world. The only difficulty left unsolved was the Practical Measures to be adopted to carry it into effect.

However, after several unsuccessful attempts to discover the true method of giving effect to this doctrine, this problem has now been successfully solved, as will be shown further on, and thus the Theory of the Paper Currency is now complete.

Effect of the Restoration of the Coinage on the Exchanges.

In the preceding remarks on the Nominal Exchange, it has been shown that the depreciation or degradation of the Coin in which the Exchanges are reckoned, must necessarily derange all the Exchanges of the country, and that a Restoration of the Coin to its due legal state will be sufficient to rectify the Exchanges.

But the state of any other portion of the Currency, or Circulating Medium, than the one in which the Exchanges are reckoned, will not affect them.

In the early part of the reign of William III., the Silver Coinage, in which the Exchanges were then reckoned, had fallen into a most disgraceful state from clipping and other causes. On collecting bags of coin from different parts of the country, it was found that their weight scarcely exceeded one-half of their legal weight. The Exchanges were entirely disordered, and the commerce of the country was thrown into utter confusion. In the beginning of 1696, the great work of the restoration of the Coinage was begun, and by July the new Coin began to be issued in considerable quantities, and the Exchanges were immediately rectified.

Bank of England Notes at this period were at a heavy discount, because the Bank had suspended payments in cash. But that produced no effect on the Exchanges, because they were not reckoned in Bank-notes, but exclusively in the Silver Coin.

FARM.

The word **Farm** is an example of those words in English which in Reality mean a Right, but which in common parlance have been corrupted to mean a Thing.

Most persons think that a *Farm* means a piece of land, and that a good farmer is a good agriculturist. This, however, is an error. The word **Farm**, like Estate, means a **Lease**. It is called *Farm*, from *firmus*, fixed; because the sum to be paid for the use of the land is fixed. Whenever a person takes a lease of anything capable of yielding profits, and upon agreeing to pay a *fixed* sum is allowed to appropriate all the remaining profit to himself, it is termed a **Farm**. Thus in many countries it used to be the custom to Farm the Taxes. The word Farm, then, like Estate, really means a Lease, and is simply a **Right**.

THE FUNDS.

The nature of the Funds has always been an inscrutable enigma to those persons who adhere to the exploded concept of Economics as the "Production, Distribution, and Consumption of Wealth."

If a person had £500,000, as it is termed, in the Funds, he would be termed a "Wealthy" person. But when the Funds themselves are termed "Wealth," many persons are scandalised at the idea that Public Debts are Public Wealth.

It is obvious that the Public Debts, or Public Credit, depends upon exactly the same principles as the Credit of private persons, which are fully explained under the article **Credit**. All the difficulties and perplexities of the subject proceed from having adopted an erroneous concept of Economics, and not having thought out and settled the meaning of its fundamental terms, as has been done in all other Sciences, and from ignorance of the elementary principles of Mercantile Law.

By adopting the concept of Economics as the Science of Exchanges, the whole subject becomes perfectly clear and simple.

Before, however, we proceed to the exposition of the subject, it will be expedient to clear away the errors with which it is infested.

Error of Mill and others regarding the Nature of the Funds.

It is first of all necessary to point out a most serious and vital error which many persons hold regarding the Nature of the Funds.

Thus Mill says (*Preliminary Remarks*), "This leads to an important distinction in the meaning of the word Wealth, as applied to the possessions of the individual, and to those of a nation, or of mankind. In the Wealth of mankind, nothing is included which does not of itself answer some purpose of use or pleasure (?). To an individual, anything is Wealth which, though useless in itself, enables him to claim from others a part of their stock of things useful or pleasant.

"Take, for instance, a mortgage of one thousand pounds on a landed estate. This is Wealth to the person to whom it brings a revenue, and who could, perhaps, sell it in the market for the full amount of the debt. But it is not Wealth to the country; if the engagement were annulled, the country would be neither poorer nor richer. The mortgagee would have lost one thousand pounds, and the owner of the land would have gained it. Speaking nationally, the mortgage was not itself Wealth, but merely gave A a claim to a portion of the wealth of B. It was wealth to A, and wealth which he could transfer to a third person; but what he so transferred was in fact a joint ownership, to the extent of a thousand pounds, in the land of which B was nominally the sole proprietor.

"The position of the fund-holders, or holders of the public debt, is similar. *They are mortgagees on the general Wealth of the country.* The cancelling of the debt would be no *destruction* of Wealth, but a *transfer* of it: a wrongful abstraction of Wealth from certain members of the community for the benefit of the Government or the taxpayers. *Funded property, therefore, cannot be counted as part of the national Wealth.* This is not always borne in mind by the dealers in statistical calculations. For example, in the estimating the gross incomes of the country, founded on the proceeds of the Income Tax, incomes derived from the funds are not always excluded, though the taxpayers are assessed on their whole nominal income, without being permitted to deduct from it the portion levied from them in taxation to form the income of the fund-holder. In the calculation, therefore, one portion of the general income of the country is counted twice over, and the aggregate amount made to appear greater than it is by about thirty

millions. A country, however, may include in its wealth all stock held by its citizens in the funds of foreign countries, and other debts due to them from abroad. *But even this is only Wealth to them by being a part ownership in Wealth held by others.* It forms no part of the collective Wealth of the human race. It is an element in the distribution, but not in the composition of the general Wealth."

How does the distinction between public and private wealth, in the above passage, consist with Mill's general definition of Wealth—as Anything which has Purchasing Power?

The fallacy that the Funds are similar to a mortgage, appears conspicuously in another writer, Mr. Capps, who gained a prize of £200, put at the disposal of the Society of Arts, for the best essay on the mode of liquidating the National Debt.

He says—"There are two antagonistic and conflicting fallacies respecting the National Debt, which are very prevalent. The first is, that funded property forms as much a portion of the wealth of the country, and is therefore to be reckoned among its assets, as lands, houses, or any other description of tangible property. The second, which is precisely the opposite of the former, is that the Debt is a subtraction, or a deduction from the wealth of the country; that the country is so much the poorer for it. Neither the one nor the other is correct; for the truth is, that the country, with the trifling exception which we shall hereafter name, is neither the richer nor the poorer for the existence of the debt, and that consequently, both the opinions we have mentioned as being prevalent, are erroneous: which we shall now proceed to show.

"With regard to the first, we have seen estimates made of the total wealth of the country, in which, after the enumeration as a portion of the wealth of the nation, of lands, houses, raw materials, and manufactured products of all descriptions, there has been an item inserted of 'Funded Property,' which has been considered as of itself an actual property, separate from, and an addition to, all other wealth. Now the debt, or the Funds, though a property to the parties who hold them, are not so to the nation as a whole; for they are only a *Mortgage upon the rest of the property of the country*; and by just so much as they are the property of the holders, they are an incumbrance and a diminution of the value of the things so mortgaged or encumbered.

"It is precisely a parallel case to the following—A is worth £10,000, in the shape of an estate of that value. B is worth £5,000 in money. A mortgages his estate to B for £5,000, and

spends the money unproductively. [Why so? Suppose he spends the money productively in improving his estate?] Let now a valuation be made of the property of A and B jointly, and we shall find that the amount of their united wealth is just the value of the estate and nothing more. The estate is worth £10,000, £5,000 of which belongs to B as mortgagee, and £5,000 is the value of the equity of redemption to A as mortgagor. The mortgage in no way adds to the value of the estate, and though it is a property to B as mortgagee, it is to the same extent a diminution to A of the value of the estate.

“It is the same with the National Debt. *The whole country and its productions are mortgaged to the fund-holders to the extent of about one-seventh of their value*; and though such funds form a property to the holders of them, they are only so in the character of a mortgage, which reduces the value of the property mortgaged to its proprietor, by just the amount of the mortgage. In taking, therefore, any account, or making any valuation of the total wealth of the country, funded property must not be put down as an item, unless you make a corresponding deduction on the other hand from the value of the property of which it forms a mortgage.”

We have quoted these passages at somewhat wearisome length, in order that we may not be supposed to have misrepresented the writers. They contain a complete series of misconceptions and errors upon a subject of great importance, and which involves several of the fundamental concepts of Economics.

Error of considering the Funds as a Mortgage on the Property of the country.

To consider the Funds as a mortgage on the lands and property of the country, as Mill, Mr. Capps, and many other writers do, is a gross and palpable error, which only arises from ignorance of the most elementary principles of Mercantile Law.

A mortgage is a formal deed, conveying rights to certain property. When were the fundholders ever put by formal deed of conveyance into possession of the country and its products? Let us see the Act of Parliament which did so. Let this wonderful deed of conveyance be produced. Until it is produced, it is clear that the Funds are not a mortgage on the property of the country.

As a matter of pure law, the Funds and a Mortgage deed belong to two totally different classes of property.

In English law, when a person borrows money on mortgage, he

actually sells the land or other property to the mortgagee in exchange for the money. The mortgage deed is a title to that specific land, or property, and to no other. The mortgagee becomes the actual legal owner of the land ; but he is bound to resell, or reconvey, the land to the mortgagor upon his repaying the money. Hence a mortgage deed is not separate property from the land ; it is but one property with it, just as Bills of Lading and Dock Warrants are titles to specific goods, and are one property with them. Mortgage deeds and Bills of Lading are not *Credit*, they are **Jura in re**.

But the Funds are pure Rights of Action against the State as a *Persona* ; or Rights of Action to demand from it a series of future payments in exchange for money, which the Fund-holders have lent or sold to the State. They are simply a Bill of Exchange payable by instalments for ever.

When a merchant gives a Bill of Exchange in exchange for goods, it is not a right or title to any Specific money, it is simply an abstract Right of Action against his person ; he merely engages that he shall be ready to pay the bill when it falls due, and therefore it is called a **Credit**.

So when the State borrows money, and gives the Right to demand a series of future payments for it in exchange, which are called the Funds, they are not Rights to any specific lands, products, or money, they are merely Rights against the State in its corporate capacity ; and they are intended to be paid out of its future income ; just as a merchant pays his acceptances out of his future income. They are therefore termed **Public Credit**.

To suppose that the Funds are a mortgage on the land and its products, is as gross an error in Mercantile Law, as it is to suppose that when a merchant accepts a Bill of Exchange he thereby grants a mortgage on his lands or house.

The Funds, like Bills of Exchange, are **Credit** ; they both belong to that class of property termed **Jura in personam**.

Mill is also grossly in error when he says that the citizens of one country may include in their wealth the stocks held by them in foreign countries, and other debts due to them from abroad ; but that it forms no part of the collective wealth of the human race ; because it is only wealth to them, as part ownership in wealth held by others.

This involves the very common but gross error that a Creditor has any Right or Property in the possessions of his debtor. But every Jurist in the world has pointed out that a Creditor has no Right or

Property in the possessions of his debtor, as we have shown fully. **(Credit, Debt.)** A Debtor's property is absolutely his own; all that his Creditor has, is an abstract Right of Action against his person to compel him to exchange some of his property to buy up the Right of Action against himself. The Right of Action and the Debtor's property, are therefore separate and distinct articles of property or Economic Quantities, and there is no joint ownership whatever. It is the very first thing which is inculcated on every student of Mercantile Law, that a Bill of Exchange is not the title to any specific money. And it is into this elementary blunder that Scholastic Economists, such as Mill, Capps, Stanley Jevons, Roscher, Marshall, and many others have fallen, which shows that they are ignorant of the rudimentary principles of Credit.

We have shown that the Funds are a class of property known by the name of *Choses-in-action* (**Chose in action**). Jurists of all nations include Abstract Rights of all sorts, such as the Funds, Bills of Exchange, &c., as Wealth, Goods, Chattels, Vendible Commodities, Merchandise; and Pothier carefully warned his readers against supposing that a Creditor has any property or right in the possessions of his Debtor.

All this notion, therefore, of a Creditor having a joint ownership in the possessions of his Debtor, which was originated, as far as we are aware, by Mill and Capps, and followed up by so many other Scholastic Economists, is a pure delusion, arising from their own ignorance of law, and persons who commit such grotesque blunders are not qualified to write on Economics at all.

Are the Incomes of the Fund-holders to be reckoned separately in the General Income of the country?

Mill then alleges that it is a statistical error to count the incomes of the fund-holders as independent incomes, in the general income of the country; as they are already paid by the taxpayers; and that to count them as separate incomes is to count the same sum twice over.

Now, if this doctrine is true—if it is a theoretical error of statisticians to count the incomes of the fund-holders as separate incomes, in the general income of the country; it is equally a practical error in the Chancellor of the Exchequer to charge the fund-holders with income tax; for that is to tax incomes twice over; but by taxing them, it is very evident that he considers them as separate incomes.

Considering the reputation that Mill formerly enjoyed as an Economist, though it is now utterly exploded among all intelligent persons, it is somewhat surprising that this doctrine, which is so comfortable for the fund-holders, never seems to have attracted their attention. If it is true, why do not the fund-holders in a body memorialise the Chancellor of the Exchequer to exempt them from the Income Tax, on the plea that their incomes have already been taxed in the general income of the country? For if it is a statistical error to count the same sum twice over in the general income of the country, it is equally a practical error to tax the same income twice over.

And if an obdurate Chancellor of the Exchequer turned a deaf ear to their memorial, why they should not take measures to have the question tried in a Court of Law? And then the Judges would read them a lesson which would soon clarify their ideas as to the nature of the Funds.

The doctrine is no doubt somewhat specious, and requires investigation; but we shall find that in this case, as in so many others, Mill asserts a dogma which hits a great many other cases besides the one he has in view.

If the argument is true that the incomes of the Fund-holders must be excluded from the general income of the country because they are already paid by the taxpayers, it applies to a great many other cases; because many other incomes are paid out of the taxes of the country, and yet are charged with Income Tax.

1.—The **Crown**. The Civil List of the Crown is paid out of the taxes of the country; therefore it is not a separate income; and therefore, according to Mill, the Sovereign should pay no Income Tax.

2.—The **Naval and Military Forces**. The payment of all seamen and soldiers is paid out of the taxes of the country; therefore they are not separate incomes; therefore, according to Mill, they ought not to pay Income Tax.

3.—The **Civil Service**. The whole of the salaries of the Civil Service, from the Prime Minister and the Lord Chancellor down to the humblest policeman, are paid out of the taxes and rates; therefore their incomes are not separate incomes; and therefore, according to Mill, they ought not to pay Income Tax.

If Mill's argument is true, the incomes of all these persons must be excluded from the catalogue of the national income, because they all stand on the same footing as the incomes of the

Fundholders—they are all paid out of the taxes of the country ; and for the same reason they ought not to pay Income Tax.

Are believers in Mill prepared to accept these conclusions? If his argument is true, how can they escape from them?

But if Mill's argument is true, it must be applied to many other cases besides those of persons who receive continuous salaries for rendering continuous services.

Many persons do it a temporary service, and are paid out of the taxes of the country. If Mill's argument is true, the sums paid by the State for these services are not separate incomes from the general income, because they are all paid out of the taxes of the country ; and therefore, according to Mill, they ought not to pay Income Tax.

The Government frequently contracts with private firms to do work for the State : with shipbuilders, to build ironclads or guns ; with contractors, to supply clothing, arms, beef, pork, rum, and other stores of all sorts ; also with private firms, for building the public offices, barracks, &c.

All these contractors are paid out of the taxes of the country.

If Mill's argument is true, the sums paid to these contractors ought not to be counted in their incomes, because they are paid out of the taxes of the country ; and the contractors ought not to be charged Income Tax on their profits made out of these contracts.

Are believers in Mill prepared to accept these conclusions? If his argument is true, how can they escape from them?

But if Mill's argument is true, it must be greatly extended ; for many persons derive their incomes from other persons, and yet they both pay Income Tax.

A great nobleman has an income of perhaps £100,000 a year. He keeps a French cook at a salary of, perhaps, £300 a year ; a Scotch gardener at £250 a year ; and a retinue of other domestics.

Now, it is evident that the incomes of all his *employés* and domestics come out of my lord's income ; and yet they are each reckoned separately in the income of the country, and my lord pays Income Tax on his income, and each of his *employés* whose salary is above the limit pays Income Tax on his income.

In short, if Mill's argument is true, the salary of no person whatever who is in the employment or service of any other person, single or corporate, ought to be counted as a separate income, and he ought not to be taxed for it.

Are believers in Mill prepared to accept these conclusions? If his argument is true, how can they escape from them?

Every Person's Income is paid out of the Income of Someone else.

But to bring the matter to a conclusion, it is easy to show that the income of every trade, business, and profession whatever is paid in succession out of the general income of the country.

The doctrine, thus stated abruptly, may seem like a paradox. Nevertheless, a very slight explanation, with the assistance of the fundamental truths of modern Economics, will very soon unravel the paradox. And it is contained in the observation of Smith, that the same pieces of money pay everyone's income in succession.

It has been shown that one of the great advances in Economics made by Smith and Condillac was that, in an exchange, *both* sides gain.

The proposition that we have stated, that every person's income comes out of the income of someone else, is the necessary consequence of Smith's observation that the same pieces of money pay everyone's income in succession, and that, in an exchange, both sides gain.

Let us take a few examples.

It is obviously true of all professional men. Where do the incomes of lawyers and medical men come from? Evidently from the incomes of their clients and patients. Where do the incomes of actors and musical performers come from? Evidently from the incomes of their audiences. And the incomes of all these persons are justly reckoned separately in the general income of the country.

Owners of land devote their labour and capital to produce corn and cattle and herds, because they know that the public want to be clothed and fed, and they make an income by so doing. And where does their income come from? Evidently from the incomes of the persons who want to be clothed and fed.

Merchants bestow their labour and capital in importing foreign commodities into the country, and by so doing they make an income. And where does their income come from? Evidently from the incomes of the persons who want their commodities.

Traders bestow their labour and capital in distributing the commodities produced by manufacturers, or imported by foreign merchants; and by so doing they make an income. And where does their income come from? Evidently from the incomes of their customers.

Landholders having earned an income by selling corn and cattle, expend their income on their *employés*, or butchers, bakers, tailors,

lawyers, doctors, and public amusements, and educating their children.

Merchants having earned an income by importing or exporting commodities, as the case may be, expend their income on their clerks and servants, or educating their children; upon butchers, bakers, tailors, wine merchants, lawyers, doctors, and places of public amusement.

Lawyers, doctors, engineers, actors, &c., having earned an income from their clients and patients, expend that income upon educating their children, upon butchers, bakers, tailors, &c., and public amusements.

Traders in a similar way having earned an income by distributing commodities, expend that income in a similar way.

And this mechanism is true of all occupations and trades in succession. In fact, the whole mechanism of society is a series of exchanges; and in all exchanges there is profit.

Each party in the exchange earns an income, and he pays Income Tax on that.

Contractors earn an income from private persons by doing them services—by building ships, houses, factories, &c.; and they pay Income Tax on their profits. Contractors do the State services by building ships, guns, public offices, barracks, and in innumerable other ways; they earn an income by so doing, just in the same way as by doing a similar service to private persons; and therefore they pay Income Tax on their profits, equally in one case as in the other.

If Mill's doctrine were true, a lawyer who earns an income by fees from private persons should pay Income Tax; but a judge who earns an income by performing judicial services to the State, and receives a salary for so doing out of the taxes, should pay no Income Tax.

But no Chancellor of the Exchequer or Court of Law would listen to such an argument for a moment.

Mill's argument, therefore, is entirely erroneous as applied to the fund-holders and all the preceding cases.

The case where it does apply is where a father makes his son an allowance to keep him at college. In this case the youth does nothing to earn an income; it is a pure gratuity; it comes out of his father's income, who receives no service in exchange for it. Such an allowance is no more to be reckoned as part of the income of the country, than the sum spent by a father in maintaining his children at home is part of the income of the country.

Suppose, again, a father has a son in the Guards, and finding that his pay is not sufficient to enable him to maintain himself suitably to his position in society, makes him an allowance. Then the pay he receives from the State is part of the income of the country, because it is earned in exchange for a service done. The allowance he receives from his father is not part of the income of the country; it is mere expenditure on the part of the father. Accordingly, the officer pays Income Tax on his pay, given for services done to the State; but not on the allowance he receives from his father.

So when a person makes an allowance to his poor relations, they pay no Income Tax on the sum so received in charity.

So the sums received as salary by the *employés* of a great nobleman are part of the general income of the country, because they are given in exchange for services done; so of contractors who do work for the public service, they receive remuneration for services done to the State; so the judges and other officials, civil and military, they all receive salaries in exchange for services done to the State. All these are independent incomes, and therefore they are all charged with Income Tax.

So the Fund-holders receive an income in exchange for a service done to the State; and accordingly their income is part of the general income of the country, just as if they had lent their money to private persons; and, therefore, they are justly charged with Income Tax.

Mill's reason for saying that the Funds are Not part of the National Wealth.

Mill says—"The cancelling of the debt would be no *destruction* of Wealth, but a *transfer* of it; a wrongful transfer of it from certain members of the community for the profit of the Government, or of the taxpayers. Funded property, therefore, cannot be counted as part of the National Wealth."

This seems a most extraordinary conclusion. A *transfer* of wealth is, in no case that we can imagine, the *destruction* of it. But Mill says, that *because* the transfer of it is not the *destruction* of it, *therefore* it is not to be counted as part of the national wealth.

A highwayman knocks down a traveller and robs him of his watch and money. Now this is only a wrongful *transfer* of the watch and money; it is not a *destruction* of them; *therefore*, according to Mill, the watch and money form no part of the national wealth!

A servant robs his master ; that is only a *transfer* of the thing stolen ; *therefore*, according to Mill, the thing stolen forms no part of the national wealth !

We wonder what kind of syllogism leads to such a conclusion ?

There is no doubt a considerable degree of subtlety about the question, but most assuredly Mill's argument throws no light upon it.

On the true Nature of the Funds.

Having now cleared away these errors and misconceptions, we shall now explain the true Nature of the Funds.

It has been shown by Demosthenes, Melon, Dutot, Adam Smith, J. B. Say, Mill, and many other writers, that Personal Credit is Wealth—because it is Purchasing Power ; and that the Credit of our Bankers and Merchants is National Wealth.

It has also been shown that the State, in its corporate capacity, is a **Persona**, quite independent of its individual citizens. That it can buy and sell and exchange in that capacity exactly like a private person ; and that with its own citizens as well as with any one else ; just as a public company can deal with its own shareholders.

It has also been shown that an Annuity is an Economic Quantity, quite separate and independent of the sums of money actually paid ; and that it can be bought and sold quite independently of them, just like any material chattel.

It has also been shown that every sum of Money is equivalent to an Annuity, either perpetual or limited ; consequently that an Annuity may be sold for Money ; *i.e.*, that they are each exchangeable quantities, and may be exchanged like any material chattels.

Moreover, the State has an income like any private person.

This being so, the State, in its corporate capacity, has **Purchasing Power** like any private individual ; and it may buy a sum of Money by granting an Annuity in exchange for it ; or the Right to receive a series of payments, either perpetual, or for a limited time, to be paid out of its future income.

That is to say the **Credit** of the State, just like the Credit of a private person, brings into Commerce the Present Value, or the Present Right, to its Future Income.

Now, the State, in its corporate capacity, has to perform certain duties, and is often in want of a considerable sum of money for an emergency, such as a war ; or to provide against a public famine ; or to create some great public work, such as a Railroad or a Canal ; or to build ironclads.

In order to effect these purposes it buys a present sum of Money, and gives in exchange for it an Annuity, or the Right to receive a series of payments out of its future income. The Money becomes the absolute property of the State; and the Annuity becomes the property of the subscribers to the Loan.

In legal language, this Annuity is termed a **Bank Annuity**; because, as we have shown, the original meaning of the word **Banco**, or Bank, is a **Public Debt**. In former times it was also called a **Rent**; but this name has gone quite out of use in England, though it is still the usual name for the Funds on the Continent.

In granting these perpetual Annuities, the State never binds itself to pay off the principal; hence, in popular language, they are called the Funds; because the capital sum is founded, or fixed. The State, however, reserves to itself the right to pay off the Annuities, if it pleases to do so; that is, to buy up these Rights of Action against itself, just as a merchant buys up his own acceptances. If the Fund-holder wishes to get back his capital, he can sell his Annuity to any other person. If the Government wishes to pay off these Annuities, it buys them in the open market like a private individual. The Funds are therefore marketable, or vendible commodities, just like any material chattels.

The Funds are, therefore, Property of exactly the same nature as the shares in a public company. The individual shareholders pay over their money to the Company as a *Persona*, and receive in exchange for it the Right to share in the future profits of the Company; the Fund-holders pay over their money to the State as a *Persona*, and receive in exchange for it the Right to receive a series of payments out of the future income of the country. The Funds are, therefore, simply a mass of Exchangeable Property, similar to Bills of Exchange, Annuities, Shares in Public Companies, and all other Incorporeal Property.

Thus **Public**, like private **Credit**, is simply the **Present Right to Future Payments**.

On the Ratio of the Public Debt to the Wealth of the country.

We shall now observe the evil consequences in Economics of the want of clear fundamental Concepts.

Mr. Capps values the Wealth of the country at £6,000,000,000; and he says that the National Debt is about one-seventh of the wealth of the country.

But what does Mr. Capps mean by the **Wealth** of the country?

Even taking the Wealth of the country as its *material* property only, such an estimate is manifestly utterly inadequate. Taking a very moderate estimate of the value of the land upon which London is built, it will be found that it exceeds £4,000,000,000; and when to this is added the value of the land upon which other great cities, such as Birmingham, Manchester, Liverpool, Leeds, Bristol, Glasgow, Aberdeen, Dundee, and hosts of others, are built, it will be found that the value of these lands alone exceeds many times the value of what Mr. Capps estimates as the value of the Wealth of the whole country. Indeed, as far as we can make out, Mr. Capps seems to exclude the whole of the land from the Wealth of the country.

Besides the author of the *Eryxias*, Smith, Say, Mill, and every Economist of note since, have all classed the natural and acquired industrial faculties of the members of the Society, as part of the Wealth of the country. Are all these included in Mr. Capps's estimate of the Wealth of the country?

Moreover, Demosthenes, Melon, Dutot, Adam Smith, Say, Mill, and every Economist of note since, all class the Personal Credit of all the bankers, merchants, traders, corporations of all sorts, and the Credit of the State itself, as National Wealth. Is all this included in Mr. Capps's estimate of the Wealth of the country?

In addition to this, there is that gigantic mass of Property termed Incorporeal Property, including Mercantile and Banking Credits of all kinds; Shares in Commercial Companies of all kinds; the good-wills of all the places of business of all kinds; the practice of professions, copyrights, patents, and many other kinds of valuable Rights. On looking at Wettenhall's list, it will be seen that the Property dealt with on the Stock Exchange exceeds £8,000,000,000; more than Mr. Capps's estimates as the Wealth of the whole country!

It is shown that the total amount of the Banking and Mercantile Credits in this country, may be approximately estimated at more than £10,000,000,000; not far from double of what Mr. Capps estimates as the Wealth of the whole country!

Moreover, how can Mr. Capps estimate the value of all the Property in the households of private persons, their plate, furniture, pictures, libraries, and curios; or the value of all the goods in the warehouses and shops of traders?

It is manifest that all estimates of the "**Wealth**" of the nation are mere delusions and snares, and of no service for any scientific purpose. It is probable that the real Wealth of the country, in its

widest estimate, would exceed Mr. Capps's estimate one hundred fold.

As a matter of fact, the Funds are not a mortgage upon the land and material products of the country, as Mill, Capps, and so many others allege ; they are a charge upon the **Income** of the country. The interest of the Debt is not a charge upon persons only who have an income from material property, but also a charge upon persons whose income is derived from industry of all sorts. The industry of all the professions, and of all intellectual capital, is just as much pledged for the payment of the dividends as the incomes of those who have real estate.

The Funds are an Annuity, payable out of the Income of the entire nation ; and consequently their weight upon the Public Wealth is the Ratio of this Annuity to the General Income of the nation.

Some persons propose that the Debt should be discharged by compelling everyone who is possessed of property to give up so much of it. But how are we to compel those persons whose property consists only in their intellectual abilities, to give up a part of it ? It is possible to confiscate material property. If a man has a thousand acres of land, or ten thousand pounds, the State may take away one hundred acres of his land, or a thousand pounds of his money. But how is the State to confiscate one-tenth of his intellectual capital ? A great advocate, physician, engineer, or other professional man, makes an income of £10,000 a year. While he does so, his talents are as much capital to him as an estate in land, which produces £10,000 a year to its owner. But how is the State to get possession of a tenth part of a man's intellectual capital ? Is it to take an axe and chop off a bit of his head ? It is clear that there is no method of taxing intellectual capital, but by taxing its **Profits**, or its **Income**. And the industrial income of every advocate, physician, engineer, and of every artisan, is as much pledged for the payment of the Funds as the income of men of real estate.

It is probable that the Ratio of the Funds to the Wealth of the country, instead of being 1 to 7, is less than 1 to 100.

Are the Funds Wealth ?

Are then the Funds Wealth ? This, of course, depends upon the meaning of Wealth. When it is once agreed, as the ancients unanimously held, and as all modern Economists have at last come

to agree to, that the word *Wealth* means simply any *Exchangeable Property*—anything whatever which can be bought and sold, as Ulpian said—whatever its nature or its form may be, it is at once seen that the *Funds* are *Wealth*, because they are a mass of *Exchangeable Property*, and they are bought and sold separately and independently of anything else, just as so much gold and silver, corn, cattle, or timber.

So Byles speaks of the *Funds* as being property second only to the land in magnitude. Say, at the very commencement of his work, expressly classes the *Funds* as *Wealth*. And every jurist in the world knows that the *Funds* are a mass of *Exchangeable Property*.

Mill, indeed, allows that the *Funds* are *Wealth* to the owners of them ; but he says that they are not *National Wealth*. Now, when we say that the word *Wealth* means any *Exchangeable Property*, *National Wealth* can only mean that property which belongs to the nation in its corporate capacity, such as public lands, forests, dockyards, the navy, &c., things which do not belong to any private individual.

When some persons are horrified at the idea that *Debts* are *Wealth*, they are ignorant that the word *Debt* has two meanings—that it means both the *Creditor's Right of Action*, and also the *Debtor's Duty to Pay*.

Now, no one says that a person's *Duty to Pay* is part of his *Wealth* ; but everyone admits that the *Creditor's Right of Action* is part of his *Wealth*.

The *Debtor's Wealth* is his *Credit*, or his power of purchasing by giving his *Promise to pay* at a future time, instead of with actual ready money.

Similarly, the *Wealth of the State* is its *Credit*, or its power of purchasing *Money* by giving in exchange for it an *Annuity*, or the *Right to demand a series of future payments* from it out of its future income ; and this *Annuity*, like all *Annuities*, is a property quite separate from the actual sums of money which will be paid in its satisfaction.

If we revert to the original concept of *Economics* by the *Economists*, it will probably tend to clear away any difficulty that there may be in the case.

The *Economists* admitted no material products to be *Wealth*, except those which were brought into commerce ; those only which were brought into commerce were *Wealth* ; those which were not brought into commerce were not *Wealth*.

The same doctrine applies to Labour and Credit, now that these are admitted to be Economic Quantities.

A man may have all the industrial abilities possible; but until he uses them for profit, they are not Wealth; directly he uses them so as to earn an income, they become Wealth and Capital.

So a merchant's or trader's Credit. So long as he refrains from putting it into action it is not Wealth; but directly he utilises it by using it as Purchasing Power, it becomes Wealth. Now, when a merchant utilises his Credit by making purchases with it, he creates a Right of Action to demand the price at a future time; that is, he brings into commerce the Present Rights to future profits. This augments the mass of Exchangeable Quantities in commerce, and, by the doctrines of the Economists, augments the Mass of Wealth.

Similarly, the Wealth of the State is its Credit, or its Purchasing Power; and when the State exercises its Purchasing Power by purchasing Money, and issuing Rights to demand payments out of its future income, it does exactly as the private merchant does; it brings into the Present Rights, or the Present Value of its future income, and thus augments the mass of exchangeable Quantities, or Wealth.

The case is exactly analogous to that of a gold mine before the Gold is extracted from the mine, and coined, and brought into commerce.

It is usual for popular writers to speak of the Mineral Wealth of a country—its gold mines, its coal mines, and other mines.

But as a technical term in Economics, the Economists unanimously held that a thing is not "Wealth" until the Gold is extracted from the mines, coined, and brought into commerce; and extracting Gold from the mine, coining it, and bringing it into commerce, augments the mass of Exchangeable Quantities in circulation; and therefore augments the mass of what, in the technical language of Economics, is termed Wealth.

Gold in the mines is, in Economics, a **Resource**; but it is not Wealth until it is brought into commerce.

Now, Personal and State Credit are Purchasing Power; and while they are unused, they are like Gold in the mine—they are a **Resource**.

But when Persons and the State utilise their Credit by making purchases with it, it is exactly analogous to extracting Gold from the mine, coining it, and bringing it into commerce.

When Persons and the State utilise their Credit by making

purchases with it, they **Coin** their **Credit**; and just as extracting Gold from the mine, coining it, and bringing it into commerce, augments the mass of Exchangeable Quantities, or Wealth, so when Persons or the State coin their Credit, it augments the mass of Exchangeable Quantities, or Wealth. It brings into commerce the Present Values of their future income; and this Credit, coined and brought into commerce, has in every respect identical effects with an equal quantity of Gold.

Thus the function of Credit, both Personal and Public, is simply to bring into commerce the Present Values of Future Profits; and that obviously increases the mass of Exchangeable Quantities, or Wealth.

The Public Debts are also called the **Public Credit**.

We now see the confusion of Mill's distinction between the Wealth of mankind and the Wealth of an individual. He says that in the Wealth of mankind, nothing is included which does not of itself answer some purpose of use or pleasure; that to an individual, anything is Wealth which enables him to claim from others a part of their stock of things.

But how can the Wealth of mankind be different in its nature from the Wealth of individuals? For the Wealth of mankind is simply the aggregate of the Wealth of individuals.

It is evident that in the one case Mill makes Wealth depend upon **Utility**, and in the other upon **Exchangeability**; the very confusion he falls into in his first chapter, and which pervades almost all modern treatises on Economics, and which the Economics emphatically warned their readers against.

But as the ancients held unanimously, **Exchangeability** is the sole essence and principle of Wealth; and Pure or Analytical Economics is simply the Science which treats of the Laws which govern the phenomena relating to Exchangeability.

A few examples will show how the utilisation of Credit augments the Wealth of a country.

When a Company undertakes to construct a public work—a railroad, a dock, a canal, or any other—it buys money from its shareholders, and in exchange for the money it gives them certificates entitling them to share in the future profits of the Company. The Company as a *Persona*, in its corporate capacity, utilises its Credit by buying money from its own shareholders. It makes the railroad, the canal, the dock, or anything else which produces a permanent revenue, and in consequence of this revenue the Shares become a valuable marketable commodity, and are therefore Wealth.

So when a Bank is formed, it buys money from its shareholders, and gives, in exchange for it, Rights to share in the future profits of the Bank. The Bank then buys Money and Bills by selling its Credit—a Right of Action instead of actual money—and some Banks make enormous profits by so doing; and the Shares, or Rights to share in the future profits of the Bank, become extremely valuable commodities, or Wealth.

Now, all these great mercantile establishments, producing the revenues of principalities, are just as much Wealth as the land of the country; because they produce utilities which are wanted, demanded, and paid for. They are all created by means of Credit.

And yet there is not a word about them in the common books on Economics.

In some countries, and in some of our colonies, it is considered as the duty of the State to execute these great public works, because there are not a sufficient number of private persons with the requisite capital to do so. But the State has no money at its command to execute them. It must therefore utilise its Credit as private companies do. It contracts loans to obtain the money, giving in exchange for them Rights to demand future payments expected to be made out of the future profits of the works; but at all events for which the State is liable.

Now these public works, being executed by the State, are Public Wealth; and they are executed by the State utilising its Credit. And the Funds issued for executing them are just as much Wealth as the shares of private companies; and these Public Loans have augmented the Public Wealth.

Again, suppose that a country is subject to inundations by the sea, and that to preserve the lives and property of the inhabitants, it is absolutely necessary to erect vast sea-dykes. Now, as these sea-dykes are absolutely necessary for the safety of the people, all the inhabitants must contribute to their formation and maintenance.

The State, then, being compelled to execute these works without delay, utilises its Credit, and buys large sums of money, by giving in exchange for them Rights to demand future payments out of the revenues of the country.

Holland is such a country as we have described. It draws twenty feet of water, and these sea-dykes are necessary for its very existence.

Now, are these sea-dykes part of the Wealth of Holland? Under

the peculiar circumstances of the case, they are wanted, they are useful, they are the products of land and labour, they cost immense sums of money. Taking the very narrowest view of Wealth that any Economist has taken, they answer all the conditions of Wealth.

It is clear that they stand in exactly the same position as railroads, canals, docks, &c., and a vast quantity of the other Fixed Capital of the country. The people continually want them; in fact, they could not exist without them; and they pay a portion of their annual income to the persons who advanced the money to make them. That forms the income of the persons who lent the money; and it is justly reckoned as a separate item in the catalogue of the general income of the country.

Most persons would admit the correctness of the preceding examples. But when we come to the Public Funds of this country, which are so many Debts just like the preceding cases, a good many persons are inclined to say—we have spent many millions of money, and what have we got for it? In the preceding cases we have got a tangible material revenue—producing substance in exchange for the money. But what have we got in exchange for the hundreds of millions of the Public Debt under which we are groaning?

Let us consider:

Suppose a person has spent his money on his amusements—hearing our famous *prima donna* sing, or in theatrical entertainments, or in oratorios, or on food, and many other things. When the money is spent and gone, it leaves no tangible material result behind. But has it been lost? Has the spender received no gratification for his expenditure? Undoubtedly he has; he considered these gratifications as the equivalent for the money, although they left no tangible result.

The country may have other wants besides the ones enumerated. It may have enemies by sea and land, and it may be necessary to raise fleets and armies to defend its existence; just as the sea dykes defend the existence of Holland. It may be necessary to contract large public loans for this purpose. The State utilised its Credit by buying large sums of money from private persons, and giving in exchange for them Rights to demand payments out of the future income of the nation. The persons who sell their money to the State for this purpose do it a service, equally as those who sold their money to the State of Holland to erect sea dykes.

What Holland gained in exchange for the money she spent on her sea dykes, is simply her existence.

So what England has gained in exchange for her Public Debts, is simply her greatness and existence as a nation. By the Public Debts contracted in the reigns of William III. and Anne, she was enabled to prevent all Europe from being enslaved by Louis XIV. By the Public Debt contracted by the elder Pitt, she acquired Canada and other transmarine possessions. By the Public Debts contracted during the wars with Napoleon, she saved her existence from being trod under the heel of that mighty conqueror, and purchased her position, as the most powerful State in Europe, in 1815. By the vast sums spent on her navy she has purchased her sea power, which is the only thing which enables the British Empire to hold together.

My esteemed friend, M. Charles Gide, of Montpellier, asks, in bitter irony, how is the Public Debt of France, contracted as an indemnity to the Germans, part of the Public Wealth of France? The answer is melancholy, but simple. That was the price she had to pay to preserve her independence as a nation, after the unfortunate result of the war of 1870-71. By this Debt she redeemed her independence. And is not her independent existence worth the money? Therefore, France is not without a consideration for that Public Debt.

The Funds are therefore a mass of Exchangeable Property, which can be bought and sold like any other property, exactly of the same nature as Bills of Exchange, Bank Credits, Bank Notes, Shares in Commercial Companies, the Goodwill of a business, Copyrights, Patents, and all other kinds of Incorporeal Property, which is termed, in Law, Incorporeal Wealth.

By contracting Public Loans the State does exactly as every private merchant does who utilises his Credit; it uses its Purchasing Power to bring into Commerce the Present Value of its Future Income, and so augment the mass of Exchangeable, or Economic Quantities, or Wealth.

GOODWILL.

The Goodwill of a business is a form of Incorporeal Property. When a trader has established a successful business which brings in a steady income, that income may be expected to continue; and the Right to receive it is a saleable or vendible commodity; it is the *emptio spei* of Roman Law.

This Right to receive the future profits of the business, is a

property quite separate and distinct from the house or shop, and the actual goods in them. It is additional to them, and is a part of the trader's assets.

Thrale, the great brewer, appointed Johnson one of his executors. In that capacity it became his duty to sell the business. When the sale was going on, says Boswell—"Johnson appeared bustling about, with an inkhorn and pen in his button-hole, like an exciseman, and on being asked what he really considered to be the value of the property which was to be disposed of, answered—'We are not here to sell a parcel of vats and boilers, but the **Potentiality** of growing rich beyond the dreams of avarice.' The latter phrase was merely Johnsonese for the Goodwill of the business. The price realised was, we are told elsewhere, £135,000.

The Goodwill of the business of a great Bank has immense value. When the banking house of Jones, Loyd, & Co., sold its business to the London and Westminster Bank, the sum paid for it was variously stated in the papers, but it was said to be about £200,000.

This property is, of course, in itself invisible and intangible. But in some cases it may be recorded on paper, and so become a material commodity, and be transferred from hand to hand, like any material goods.

If any one were to buy up all the shares in a great Joint Stock Bank, he would buy up the whole concern. The shares at par represent the value of the original capital. But the market value of the shares in most great Banks several times exceeds their value at par. The difference between the par value of the shares and their market value, represents the value of the Goodwill of the business.

So the value of the Goodwill of the business of our great London and provincial newspapers, the *Times*, *Daily Telegraph*, *Standard*, &c., is something colossal.

In a similar way every place of business in the country has a valuable asset in the Goodwill of the business, which is analogous to the Right to receive the future profits of the land; and it will be at once seen that this species of property is of enormous magnitude. It can neither be seen nor handled, but its value can be measured in money. It can be bought and sold; it is, therefore, a saleable commodity; it is the *emptio spei* of Roman Law.

GRESHAM'S LAW.

This is a name which I gave, in 1857, to a great fundamental Law of superlative importance in Economics, which, though well known to specialists, had never hitherto received in treatises on Economics that prominence which its supreme importance deserved. It has now acquired additional importance from the doctrines which are now held, and are very vehemently advocated by many influential persons in most countries.

I gave it this name, in 1857, because it was first explained to Queen Elizabeth in 1558, by Sir Thomas Gresham; but my friend, M. Wolowski, in 1864, published two most important treatises, hitherto unknown, by Oresme, who had announced it to Charles V., surnamed the Wise, in France in 1366; and by Copernicus, who had quite independently, and without knowing anything of Oresme's Treatise, announced it to Sigismund I., King of Poland, in 1526. This law has now universally acquired the name of Gresham's Law, in accordance with my suggestion in 1857; but it ought in justice to be called the Law of Oresme, Copernicus, and Gresham.

This Law may be stated in these terms:

"The worst form of Currency in circulation regulates the Value of the whole Currency, and drives all the other forms of Currency out of circulation."

The first occasion, that I am aware of, in which the fact was noticed that bad money drives good money out of circulation, was by Aristophanes. The Athenians had a splendid coinage of gold staters, which were the finest coinage in the world, and greatly conduced to the commercial supremacy of Athens. In the stress of the Peloponnesian war, in 407 B.C., she issued a debased coinage, which immediately drove all the good gold staters out of circulation.

Aristophanes says (*Batr.* 713), "The State has now very often appeared to us to be placed in the same position towards the good and noble citizens, as it is with regard to the old currency and the new gold. For we make no use at all of those which are not adulterated, but the most beautiful of all money, as it would seem, which are alone well coined and ring properly, both among Greeks and foreigners; but of this base copper, struck only yesterday and recently, of a most villainous stamp. And such of the citizens as we know to be well born, and prudent and honourable gentlemen, and educated in the palæstra and chorus and liberal knowledge, we insult. But the impudent and foreigners, and the base born,

and the rascals, and the sons of rascals, and those most recently come, we employ."

This fact has been observed in every age and country. But the cause of it was first explained by the illustrious men we have named, Oresme, Copernicus, and Gresham; and henceforth it became a demonstrated law, now universally acknowledged and recognised in all discussions on the Coinage.

The vast controversy between the Bimetallists and the Monometallists may be reduced to a single simple and definite issue.

Suppose that Governments issue Gold Coin and Silver Coin in unlimited quantities, and endeavour to establish a Fixed Ratio between them by Law.

1. Is it the Legal Ratio fixed between the Coins which governs the relative value of the Metals in Bullion?

2. Or is it the relative Market Value of the Metals in Bullion which governs the relative value of the Coins?

3. And if each Government separately cannot, under such circumstances, maintain unlimited quantities of Gold Coin and Silver Coin in circulation at a Fixed Legal Ratio, can all the Governments in the world, or at least the principal mercantile countries, maintain unlimited quantities of Gold Coin and Silver Coin in circulation, if they agreed to enact a uniform Ratio?

The Bimetallists maintain the first of these propositions; the Monometallists maintain the second.

To the third issue the Bimetallists reply in the affirmative; the Monometallists in the negative.

The gradual adoption, by most of the European States and others throughout the world, of a single Gold Standard, coined in unlimited quantities, and made Legal Tender to an unlimited amount, with Coins of other metals, such as Silver, strictly limited in quantity, and only to be used as subsidiary to the standard limit—which is termed **Monometallism**—is one of the most important Economical events of the nineteenth century.

The purpose of the following remarks is to explain concisely, but sufficiently fully, the facts and the reasons which induced all the nations in Europe, after having tried in vain to maintain Bimetallism for five hundred years, finally to abandon it as hopeless and impossible, and to adopt the single Gold Standard, which is Monometallism.

As this law was first demonstrated in France, we shall take the case of that country first.

Charlemagne instituted the system of Coinage which was adopted by all the States of Western Europe. He declared the pound weight of Silver to be the standard, and divided it into 240 *denarii*, or pennies; 12 *denarii* were called a *solidus*, or shilling; and therefore 20 *solidi* made a pound.

The Kings of France maintained the weight and purity of the coins till about 1108, when Louis VI. issued a very debased coinage—half copper and half silver—which made such terrible confusion that he was obliged to promise that he would not debase it any more. With the single exception of St. Louis, the following Kings continued to degrade and debase the coinage, as they conceived that it was part of their inalienable divine right to regulate the value of commodities, and that they could by their *fiat* compel their subjects to accept the debased coins at the same value as good coins. They caused terrible distress and confusion, ruining the merchants, and driving away commerce from the country. In 1364, Charles V., surnamed the Wise, saw that the debasement of the coinage had greatly impoverished France, and had contributed greatly to the political troubles which had so cruelly torn the country. He referred the matter to Nicholas Oresme, one of his wisest and most trusted councillors, who in answer to the appeal of his Sovereign, produced his great *Traictie de la première Invention des Monnoies*, which may be justly said to stand at the head of modern Economic literature, and laid the foundations of Monetary Science.

Oresme begins by explaining the nature and uses of Money, and then he laid down the following principles:

1. That the Sovereign has no right to diminish the weight, debase the purity, or change the denomination of the Coin. To do so is robbery.
2. That the Sovereign can in no case fix the value of the purchasing power of the Coins. If he could do so, he could fix the value of all other commodities, which was, indeed, the idea of mediæval Sovereigns.
3. That the Legal Ratio between the Coins must strictly conform to the relative market value of the Metals.
4. That if the fixed Legal Ratio of the Coins differs from the natural or market value of the Metals, the Coin which is underrated entirely disappears from circulation, and the Coin which is over-rated alone remains current.
5. That if degraded and debased Coin is allowed to circulate along with good and full-weighted Coin, all the good Coin disappears

from circulation, and the base Coin alone remains current, to the ruin of commerce.

This distinguished Frenchman in the fourteenth century, was the first to raise his protest against the idea that Sovereigns could fix the value of the Coins and other commodities.

The same ideas and evils existed all through Europe, and were called *morbis numericus*.

Poland, which then comprehended the modern Prussia, was afflicted with these evils. Sigismund I., King of Poland, sought the advice of Copernicus, who was a member of the Prussian Diet. At the instance of Sigismund, Copernicus drew up a masterly treatise on Money, which he entitled *Ratio monetæ cudendæ*, which has only been discovered within the present century, and is included in the magnificent edition of his works printed at Warsaw, in 1854.

Copernicus had no knowledge of the treatise of Oresme, written 160 years before his time, but he came to exactly the same conclusions. They were :

1. That it is impossible for the prince to regulate the value of the Coins or of any other commodity.

2. That all that the prince or the law can do, is to maintain the Coins at their full legal weight, purity, and denomination.

3. That it is robbery for the prince to diminish the weight, debase the purity, or change the denomination, of his Coins.

4. That it is impossible for good and full-weighted Coin, and degraded and debased Coin to circulate together ; that all the good Coin is hoarded away, melted down, or exported ; and the degraded and debased coin alone remains in circulation.

5. That the Coins of gold and silver must bear the same ratio to each other as the metals do in the market. It is impossible to keep gold and silver Coins in circulation together in unlimited quantities, at a fixed legal Ratio, differing from the market ratio of the metals. The Coin which is underrated disappears from circulation, and the coin which is overrated alone remains current.

6. That when good coins are issued from the Mint, all the base and degraded Coins must be withdrawn from circulation, or else all the good coins will disappear to the ruin of commerce.

7. That it is impossible to have two measures of Value in the same country, just as it is to have two standard measures of weight, length, or capacity.

The early English sovereigns did not debase their Coins ; but immense quantities of base and degraded Coins were in circulation, and consequently all the good Coin disappeared as soon as it

was issued from the Mint. Edward I. was the first to diminish the weight of the Coin. He coined 243 pennies out of the pound weight of silver, and by successive diminutions the pound weight of silver was coined into 744 pennies under Elizabeth. The instant disappearance of the good coin as soon as it was issued from the Mint, was the subject of repeated debates in Parliament for centuries, and was an inscrutable puzzle to financiers and Statesmen. They thought that it was a direct inspiration of the Evil One that made people prefer bad coin to good coin. But they had no Oresme or Copernicus to explain it to them, and the only remedy they could suggest was to enact penalties of death and mutilation against those who exported good coin.

At last Sir Thomas Gresham explained to Queen Elizabeth that good coin and bad coin cannot circulate together, but that the good coin entirely disappears, and the bad coin alone remains current. As Gresham was the first in this country to explain that permitting bad coin to circulate was the cause of the disappearance of the good coin, I suggested, in 1857, that this should be called Gresham's law, and this has now been universally adopted. But as Oresme and Copernicus had both declared this law before him, it ought to be called the Law of **Oresme, Copernicus, and Gresham**.

This great fundamental law of the coinage soon became common knowledge. It is thus stated in a pamphlet in 1696 :

"When two sorts of Coin are current in the same nation of like value by denomination, but not intrinsically [i.e., in market value], that which has the least value will be current, and the other, as much as possible, will be hoarded," or melted down, or exported, we may add.

This great Law applies in the following cases :

1. If the Coins consist of one metal only, and clipped, degraded, and debased Coins are allowed to circulate along with good Coins, all the good Coins disappear ; they are either (1) hoarded away (2), melted down or (3), exported ; and the bad coin alone remains in circulation.

2. If Coins of two metals, such as gold and silver, are allowed to circulate together in unlimited quantities at a fixed Legal Ratio, which differs from the relative market value of the metals, the Coin which is underrated disappears from circulation, and the Coin which is overrated alone remains current.

3. As a necessary corollary it follows that it is impossible to maintain a fixed Par of Exchange between countries which use different metals as their Standard Unit.

This Law is not confined to single and separate counties, it is not limited in Time or Space, it is absolutely universal ; and it is equally impossible for the whole world to maintain Coins of two or more metals in circulation in unlimited quantities, at a fixed Legal Ratio, which differs from the natural or market value of the metals, as it is for single and separate countries to do so.

The explanation of this problem, which was an inscrutable mystery to statesmen and financiers for so many ages, is extremely simple. If shillings are allowed to circulate together, some of which are worth twelvepence, and others only ninepence, and everyone is allowed to pay his debts in which of them he pleases, he will naturally pay his debts with the shillings worth ninepence, and keep those worth twelvepence in his pocket. Or if shillings worth twelvepence have no more value than shillings worth ninepence, bullion dealers collect all the heavy coins they can, and melt them down into bullion, in which form they have more value ; or they export them to foreign countries, where they have their full value. Thus the underrated coins have invariably been found to disappear in one or other of these three ways.

It is exactly the same in all cases in which persons are allowed to pay their debts in things which have nominally the same value, but in reality are of different values. When persons are allowed to pay their rents in kind, they naturally select the worst portions of the produce to pay their landlords, and keep the best portions for themselves.

If the law allowed two different yard measures to be used, one of three feet and one of two feet, and a merchant received an order for so many yards of cloth, he would naturally fulfil the order in yards of two feet, rather than in yards of three feet.

If the law allowed two miles to be used, one of 1,000 yards and one of 1,760 yards, and a cabman was desired to drive five miles, he would naturally drive five miles of 1,000 yards, rather than five miles of 1,760 yards.

So if the law allows debtors to pay their debts in coins of different metals, which are rated equally in law, but whose value differs in the market of the world, they will naturally pay their debts in the coin which is overrated, and keep the coin which is underrated at home. Then inevitably the coin which is underrated disappears from circulation, and that which is rated above its natural or market value alone remains current ; and this is true, whether single and separate States do so, or whether the whole world does so. For

the whole world can no more by universal agreement make nine equal to twelve than any separate State can.

For the very same reason, it is impossible to maintain a fixed Par of Exchange between countries which use different metals as their standard, because coins are only accepted in foreign countries according to the market value of the bullion they contain; and as the value of the metals is constantly changing in the market of the world, the value of the coins must equally do so, too.

The truth of these principles, which are gathered from the experience of ages, is incontrovertible.

In 1663, the first coinage of guineas, made from gold imported by the African Company, took place. By the Mint indenture, they were struck to be of the value of 20s. in silver, at the market value of gold and silver at the time. But they were never made legal tender at that rate. They consequently circulated at the rate which people choose to place on them, and they soon passed at 22s. The silver coinage became shamefully clipped, worn, and degraded, and the rating of the guinea became higher and higher; and, as always has happened, all the good coin was melted down or exported.

In April, 1690, the goldsmiths complained to the House of Commons that they had ascertained that vast quantities of silver bullion had been exported. That many Jews and merchants had recently bought up immense quantities of silver to carry out of the kingdom, and had given three-halfpence an ounce for it above its regulated value. That this had encouraged the melting-down of much plate and milled money, whereby for six months no bullion had been brought to the Mint to be coined. A Committee of the House verified these allegations. It was shown that the profits of melting-down the milled money was above £28 per £1,000; and that while the Mint price of silver was 5s. 2d. per ounce, the current price was 5s. 3½d.

In 1691, a posthumous work by Sir William Petty was published, in which, as far as we are aware, is the first announcement of the principle that the standard coin should be made of one metal only. He says (*Political Economy of Ireland*, ch. 10) that Money is understood to be the uniform measure of the value of all commodities; that the proportion of value between pure Gold and fine Silver alters, as the earth and industry of men produce more of one than the other. That Gold has been worth but twelve times its own weight in Silver, but that of late it has been worth

fourteen ; "*so there can be but one of the two metals of Gold and Silver to be a fit matter for Money.*"

This is, as far as we are aware, the first enunciation of the great principle that only one metal should be adopted for the standard Coin and measure of value. Nor are we aware of what amount of attention it received when announced.

The state of the silver coinage had been continually becoming worse, and the nominal price of guineas rising. In the months of May, June, and July, 1695, 572 bags of silver coin, each of £100, were brought into the Exchequer, whose aggregate weight, according to the standard, ought to have been 18,451 lbs. : their actual weight was 9,480 lbs., showing a deficiency in the current coins in the rate of 10 to 22. Guineas had risen to 30s., and the exchange with Holland had fallen 25 per cent.

A writer says—"And so by degrees, as the silver coin was diminished and debased in itself, so it fell in the estimation of the people ; and in proportion gold advanced, and also bullion (that is, not in itself, but in proportion to the bad money) ; not that bullion became worth 6s. 5d. an ounce, or guineas 30s. in good money—that is, in weighty standard money—but in clipped and counterfeit money, whereof 6s. 5d. was not of the true and esteemed value of 5s. 2d. And as we ourselves grew sensible of the want of value in money that passed, so did foreigners likewise, *and the Foreign Exchanges soon altered accordingly* : so that it cannot properly be said that bullion is advanced much, but that the money that is exchanged for them is much less value than it was ; and the new coining of our money will not, as I apprehend, alter the value of bullion, gold, etc., but it will bring silver in coin to its due value."

"If guineas continue current at 30s. a piece, the exchange will continue about the rate it does, except the common and ordinary variation, which many sudden drafts and remittances occasion : *and if guineas fall, the exchange will rise in proportion ; and if the silver coin is redressed, guineas will fall.*"

He repeatedly declares that the only way to set matters right was to reform the coinage.

Mr. William Lowndes, the Secretary to the Treasury, was ordered to make a report on the coinage. In this he enters into a long, and, at that time, valuable, investigation of the history of the coinage, and its successive depreciations in weight and fineness, in which he maintained the extraordinary hallucination that the successive frauds committed by the English kings in diminishing the bullion in the

coin *had raised its value*. His doctrine was, that by raising the *name* of the coin, it thereby acquired increased value. His proposal was, either that the new coinage should be made of a diminished weight, or that the same pieces should be rated at a higher price in tale, or that 60 pence were equal to 75 pence.

The proposal of Lowndes, coming from a person holding his official position, demanded an immediate answer. Locke performed the task in a manner worthy of his genius, which has remained unassailable ever since. (*Further Considerations concerning raising the Value of Money*. Works, vol. iv.) This is far too long to be quoted here, but it is given in my *Bimetallism*. He says—"Raising of coin is but a specious word to deceive the unwary. He only gives the usual denomination of a greater quantity of silver to a less (*e.g.* calling four grains of silver a penny to-day, when five grains of silver made a penny yesterday); but adds no worth, or real value, to the silver coin to make amends for its want of silver. That is impossible to be done, for it is only the quantity of silver in it that is, and eternally will be, the measure of its value; and to convince anyone of this, I ask whether he that is forced to receive but 320 ounces of silver under the denomination of £100 (for 400 ounces of silver, which he lent under the like denomination of £100) will think these 320 ounces of silver, however denominated, worth those 400 ounces he lent? If anyone can be supposed to be so silly, he need but go to the next market, or shop, to be convinced that men value not money by the denomination, but by the quantity of silver there is in it. One may as rationally hope to lengthen a foot by dividing it into fifteen parts instead of twelve, and calling them inches, as to increase the value of silver there is in a shilling by dividing it into fifteen parts instead of twelve, and calling them pence."

"I have spoken of silver coin alone, because that makes the money of account and measure of trade all through the world. For all contracts are, I think, everywhere made, and accounts kept, in silver coin.

"Silver, therefore, and silver alone, is the measure of commerce. *Two metals as gold and silver cannot be the measure of commerce both together in any country* [Locke here enunciates the same doctrine as Copernicus]; because the measure of commerce must be perpetually the same invariable, and keeping the same proportion of value in all its parts. *But so only one metal does, or can do, to itself*: so silver is to silver, and gold to gold. An ounce of silver is always of equal value to an ounce of silver, and an ounce of gold to an ounce of

gold; and two ounces of the one or the other of double the value to an ounce of the same. But gold and silver change their value to one another; for suppose them to be in value as 16 to 1 now, perhaps the next month they may be as 15½ or 15¼ to 1. And one may as well make a measure, *e.g.* a yard, whose parts lengthen and shrink, as a measure of trade, of materials that have not always a settled invariable value to one another.

"One metal, therefore, alone can be the money of account and contract, and the measure of commerce in any country."

Locke then goes through each of Lowndes' arguments and proposals one by one, and gives them such a refutation as would have delighted the heart of Chillingworth. To Lowndes' doctrine, that raising the coin by making it more in tale would make it more abundant for general use, Locke says—"Just as the boy cut his leather into five quarters, as he called them, to cover his ball, when cut into four quarters it fell short; but after all his pains, as much of his ball lay bare as before—if the quantity of coined silver employed in England fall short, the arbitrary denomination of a greater number of pence given to it, or, which is all one, to the several coined pieces of it, will not make it commensurate to the size of our trade, or the greatness of our occasions.

"The increase of denomination does, or can do, nothing in the case, for it is silver by its quantity, and not denomination, that is the price of things and measure of commerce; and it is the weight of silver in it, and not the name of the pieces, that men estimate commodities by, and exchange them for.

"If this be not so, when the necessity of our affairs abroad, or ill husbandry at home, has carried away half our treasure, and a moiety of our money is gone out of England, it is but to issue a proclamation that a penny shall go for twopence, sixpence for a shilling, half a crown for a crown, &c., and immediately, without any more ado, we are as rich as before; and, when half the remainder is gone, it is but doing the same thing again, and raising the denomination anew, and we are where we were; and so on. Whereby, supposing the denomination raised 15-16ths, every man will be as rich with an ounce of silver in his purse, as he was before when he had 16 ounces there, and, in as great plenty of money, able to carry on his trade without bartering; his silver, by this short way of raising, being changed into the value of gold, for when silver will buy 16 times as much wine, oil, and bread, &c., to-day as it would yesterday (all other things remaining the same but the denomination), it hath the real worth of gold.

“This, I guess, everybody sees cannot be so, and yet this must be so, if it be true that raising the denomination one-fifth can supply the want, or one jot raise the value of silver in respect of other commodities; *i.e.*, make a less quantity of corn, oil, and cloth, and all other commodities, than it would yesterday, and thereby remove the necessity of bartering. For, if raising the denomination can thus raise the value of coin in exchange for other commodities one-fifth, by the same reason it can raise it two-fifths, and afterwards three-fifths, and as much farther as you please. So that, by this admirable contrivance of raising our coin, we shall be rich, and as well able to support the charge of the Government, and carry on our trade without bartering, or any other inconvenience for want of money, with 60,000 ounces of coined silver in England, as if we had six or sixty millions. . . . If this could be, we might, as every one sees, raise silver to the value of gold, and make ourselves as rich as we pleased.”

Thus Locke shows that if it be possible to fix the value of gold to silver by law, at the ratio of $15\frac{1}{2}$ to 1 when the natural or market value is $35\frac{1}{2}$ to 1, it would be just as easy to make silver equal in value to gold at once.

Parliament resolved to recoin the silver at the old standard of weight, fineness, and denomination. It cost £3,000,000. But no sooner was the new coin issued from the Mint than it was hoarded, or exported to purchase gold. Several proclamations were issued gradually reducing the price of guineas. Eventually the Treasury gave notice that they would be received at the rate of 21s. 6d. But, even at that price, all the best and heaviest silver coins were culled out and exported to Holland, where gold might be purchased at a great profit; and men's ideas began to be transferred from silver to gold as the standard coin.

The Government, in their perplexity, referred the whole question to Sir Isaac Newton, the Master of the Mint, and he presented an elaborate report (*Parliamentary History*, vol. vii. col. 526), shewing the different ratios at which gold and silver were coined in the different States of Europe, and that, according to the market rate of gold and silver, the real value of the guinea was only 20s. 8d., instead of 21s. 6d., at which it currently passed. This necessarily caused all the good silver to disappear. He recommended that the price should be reduced to 21s. by way of experiment. This was accordingly done, and the value of the guinea was then fixed at 21s. But as the guinea was still overrated by 4d., the guinea became, by Gresham's Law, the standard current coin, and it became the

recognized custom of merchants that all mercantile obligations were payable in gold; and the Foreign Exchanges were reckoned in the gold coin instead of silver. Thus, ever since 1718, England has been practically a **Gold Monometallic** country, although the Bimetallic law still lingered on for another hundred years in the Statute Book. At the great recoinage in 1816, this custom, which had been in use for a hundred years, was adopted as Law, and our present system of coinage was established.

When the East India Company extended their dominion over India, they found the multiplicity of gold and silver coins in circulation (994 in number)—of different weights and fineness, and constantly varying in value—an intolerable nuisance. They endeavoured to establish Bimetalism—*i.e.*, to issue Gold and Silver Coins at a Fixed Legal Ratio—in 1766. They struck a Gold Mohur, and ordered it to pass current for 14 sicca rupees. But as the rating of this gold mohur was much below the current silver value of gold, it was found impossible to get it into circulation. It was accordingly called in, and in 1769 a new gold mohur was issued and ordered to pass current at 16 sicca rupees. But this coin was not a success. The Company, being in great perplexity at the disorder of their coinage, sought the advice of Sir James Stewart, who had the greatest reputation in England as an Economist before the publication of the *Wealth of Nations* in 1776. Sir James Stewart accordingly drew up a treatise for them in 1772 (*The principles of Money applied to the present state of the Coin of Bengal, 1772.*) He enforced exactly the same principles as Oresme, Copernicus, and Gresham had done before him. He showed that the defect of coining both metals arose from the rivalry of the metals themselves. They have been adopted equally as a medium of commerce, or as an adequate equivalent for everything that can be bought. But how can the value of the coins remain stable while that of the metals varies? He then showed that a change in the relative value of the metals threw all business into confusion. Sir J. Stewart then shewed that if either metal be adopted as the standard, the other must be adjusted to it from time to time. He then pointed out why the attempt to fix a value between the coins by the Company had completely failed; and that the Silver Coins had been melted down and exported. In proportion as the denomination of a coin was raised above its market value, the value of such denomination was debased, and the exportation of the coin which was undervalued was promoted. The Indian Government

made several attempts to remedy the evils pointed out by Sir J. Stewart, but they were attended with very partial success.

In 1806, the masterly and unanswerable treatise of Lord Liverpool, on the Coins of the Realm, reached India, and it was immediately taken into consideration by the Governor-General in Council, and they issued a Minute to the Governments of Bombay and Madras on the whole question of the coinage. This important Minute had never hitherto been published, but the India Office most courteously has permitted me to make it public, and I proceed to quote the parts of it relating to Bimetallism in full, because it is not accessible to the public.

“In the prosecution of our inquiries, we have referred to a Letter from the Earl of Liverpool to the King, on the Coins of the Realm, copies of which we transmit with the present dispatch. We think his Lordship has established the principle that the ‘**Money, or Coin, which is to be the principal measure of property, ought to be of one metal only.**’ In applying this argument to a Coin for general use in India, there cannot be a doubt, in our opinion, that such a Coin must be silver.

“It is our opinion, supported by the best authorities, and proved by experience, that Coins of Gold and Silver cannot circulate as legal tenders of payment at fixed relative values, as in England and India, without great loss: this loss is occasioned by the fluctuating value of the metals of which the Coins are formed. A proportion between the Gold and Silver Coins is fixed by law, *according to the Value of the Metals*, and it may be on the justest principles: but owing to a change of circumstances, Gold may become of greater value, in relation to Silver, than at the time the proportion was fixed: it therefore becomes profitable to exchange Silver for Gold, so the coin of that metal is withdrawn from circulation: and if Silver should increase in its value, in relation to Gold, the same circumstances would tend to reduce the quantity of Silver coin in circulation. *As it is impossible to prevent the fluctuation in the value of the metals, so it is equally impracticable to prevent the consequences thereof on the Coins made from these metals.*

“From these circumstances the Coin of England has been much disordered, and the papers referred to have plainly shewn the losses and inconveniences experienced in India from similar causes. The loss in Bengal was certainly enhanced by giving to the Gold Coin, at the period of its issue, an improper value, in reference to the Silver Coin. Loss and inconvenience have been occasioned at Madras by the contrary error, where the Silver Coin was rated at

too high a value in relation to the Gold Coin. *But there is a radical defect in the principle itself of giving a fixed value to metals in Coin, that are in their nature subject to continual change*: because the metals, being articles of commerce, their value will fluctuate with the demand. Had the nicest proportion been fixed between the Gold and Silver Coins of Bengal and Madras, at the time of their issue; yet the first alteration in the price of the metals would have occasioned the *Batta* (premium) so much complained of, though such *batta* had not existed before. The alteration in the value of the metals in Europe has been the principal cause of the present state of the English Silver Currency: a debased and counterfeit money having been introduced into circulation, which does not possess above one-third of the intrinsic value of the legal Coin of the realm. To adjust the relative values of the Gold and Silver Coins, according to the fluctuations of the metals, would create continual difficulties, and the establishment of such a principle would of itself tend to perpetuate the inconvenience and loss.

“Having stated our views concerning a general Currency for British India, we deem it unnecessary to make any observations on the advantages attending such a measure, as our Governments abroad, by constant experience of the manifold evils of the present system, are fully competent to appreciate the benefits that would result from the adoption of a plan, whereby a Coin of one standard weight and fineness would become exclusively current as the general measure of value.”

This weighty Minute is of decisive authority in the question. The Indian Government, from its own experience of Bimetallism, united its judgment to the arguments of Oresme, Copernicus, Gresham, Petty, Locke, Harris, Newton, Sir James Stewart, and Lord Liverpool, that it is impossible to maintain Coins of Gold and Silver in circulation in unlimited quantities, at a fixed Legal Ratio, differing from the relative market of the metals: but the one which is underrated disappears from circulation, and the one which is overrated alone remains current.

This fundamental law of the coinage was further confirmed by the experience of France from 1803 to 1874, which is usually cited by the Bimetallists as the golden age of Bimetallism, but which, in reality, is the complete refutation of their doctrines, and is another proof of the truth of Gresham's Law.

After innumerable changes, the Ratio of Gold to Silver in France was fixed, in 1726, at $14\frac{1}{2}$ to 1. By this, however, the value of Gold was underrated, and by Gresham's Law it disappeared, and

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Silver became the standard of France. In 1785, Calonne changed the ratio to $15\frac{1}{2}$, and this was confirmed in 1803; and the Bimetallists contend that this ratio kept the market value of the metals steady till 1873. But this allegation is wholly erroneous. The French liberating armies plundered the sanctuaries of the countries they came to liberate of their silver, which was sent in immense quantities to the Paris Mint to be coined. This caused the ratio of Silver to Gold to fall to 1 to 17. When the market price of either metal rises above the legal ratio, that metal is said to be at a *Premium*; and, as a necessary consequence, it disappears from circulation by Gresham's Law. From 1803 to 1850, Gold was constantly at a premium; and, as a necessary consequence, there was no Gold in general circulation. There was, of course, plenty to be had at the Bank of France; but those who wanted it had to pay a premium for it. The evidence on this point is absolutely overwhelming and indisputable. I can speak from personal experience. In 1839-40, I resided in France, and travelled through and through it; and there was not a single gold coin to be seen in general circulation, nothing but bags of silver five franc pieces. But after 1849-50, large quantities of gold came in from California and Australia. The value of gold began to fall. The legal ratio was $15\frac{1}{2}$, and the market value of silver was $15\frac{3}{4}$. So long as this was the case, there was no gold in circulation. But the value of silver rose from $15\frac{3}{4}$ to $15\frac{1}{2}$; and this apparently slight change in the relative value of gold and silver sufficed in a few years to drive more than £150,000,000 of silver coin out of circulation, and substitute an equal amount of gold for it. Silver rose to a premium, and disappeared from circulation. In 1857, I was residing at a French seaport town, and every steamer that came in was laden with casks of Scotch whisky, going to be transmuted into French brandy, and every steamer that went out had its decks piled with bags of silver five franc pieces. It was the same at every other port. At last silver became so scarce, that it became necessary to coin those detestable gold five franc pieces.

In 1865, the Latin Union was formed of France, Italy, Switzerland, and Belgium, to coin gold and silver in unlimited quantities, at the ratio of $15\frac{1}{2}$. But silver had begun to fall again; and in 1867, fears began to be entertained as to the stability of the Latin Union. A Commission, however, in that year voted by a majority against the adoption of a single gold standard. But in 1868, another Commission voted by a majority strongly in favour of a single gold standard; and another Commission, in 1869-70, came

to the same conclusion. In June, 1870, a Commission was appointed in Prussia to consider the expediency of adopting a single gold standard. But the Franco-German War broke out immediately afterwards, and put a stop to all such debates.

By Acts of November, 1871, and May, 1873, Germany adopted a single gold standard, with a subsidiary currency of silver. In December, 1872, Belgium adopted a single gold standard, with silver as subsidiary. In December, 1872, a debate was held at the *Société d'Economic Politique*, of Paris, on the question of a single or double standard, and the majority were in favour of a single gold standard. Again, in January, 1874, a Monetary Conference was held in Paris. M. Dumas, of the Paris Mint, presided; M. de Parieu was Vice-President. And the result of this was that the right of the free coinage of silver was abolished. This, as the *Economist* said, was "an adhesion to the theory of a single gold standard on the part of the French Government; and their appointment of M. de Parieu as one of the Commissioners to represent them is a fresh sign of their being in favour of the gradual abolition of a law which, after seventy years' experience, is found to be effete in theory, and prejudicial in action."

Thus the assertions of the Bimetallists are utterly confuted. It is absurd to suppose that the French Government would have taken the very serious step of closing the Mints to the free coinage of silver without extremely cogent reasons. It is now shown that the necessity for it had been foreseen for six years, and it was only done after the fullest discussion, and by the recommendation of the most experienced authorities.

Gresham's Law is universal, because it is founded on instincts and qualities of human nature which are universal in every age and in every country, that is, the instinct and the desire to seize upon any profit that can be made. And in every age, and in every country, men have seen that a profit is to be made by melting-down or exporting coin which is underrated by law.

INTEREST.

When a person "borrows," *i.e.* buys, a sum of money, and promises to pay a sum for its use at the end of the time he borrows it for, this sum is termed Interest.

At the present time it is not necessary to say very much respecting the extraordinary prejudice which prevailed for so many ages against

Interest or Usury, on Money—a prejudice which has only died out very recently in this country, and still prevails in many foreign countries where Usury Laws still exist.

We may shortly explain, however, how the prejudice arose. If one plants corn in the ground, the corn increases in actual visible quantity, which is palpable to the senses: or if one has flocks or herds, they multiply and increase of themselves in the ordinary course of Nature. But if Money were sown in the ground it would not increase, nor are marriages celebrated between sovereigns, giving rise to half-sovereigns. Consequently, the idea took possession of men's minds that Money is, in its own nature, barren, and incapable of increase, and it is a crime against Nature to take Interest, or Profit, for the use of Money.

It was quite overlooked that Capital may increase by Exchange, as we have shown (**Capital**), as well as by increase of actual quantity.

The greatest minds, therefore, the world ever saw were enthralled with the extraordinary delusion that it was a great crime to take Interest for the use of Money. Aristotle considered the bounty of Nature as the only true source of wealth, and had a strong aversion against trading. He observes that there are two uses of everything—its actual use and exchange. The one he considers natural, and the other against nature. A shoemaker would, however, probably consider the exchange of a shoe quite as natural an operation as using it. Aristotle, however, looked with a very doubtful and jealous eye on all exchanges. And money being for the very purpose of facilitating exchanges, was in its nature of a dubious origin: and when that purpose, which is already dubious, was changed into lending it as Usury, the mischief was doubly aggravated: and he pronounces the last mode of using it to be utterly detestable and abominable.

The Hebrew legislator and prophets strongly denounced Usury: but it is evident that they did not refer to interest on money advanced in the way of trade, when its very purpose was to make profits, but to charitable loans to persons in necessitous circumstances.

Nevertheless, the Mosaic interdict of Usury was adopted, and confirmed in its broadest and most unqualified terms by the rulers of the Christian church. Money-lenders, never a very popular class anywhere, were laid under the Divine curse, the consequence of which was that in the sixth century the Jews had become the great money-lenders of Christendom. As the Jews had no hopes

for the future, another sin, more or less, could not influence their destiny. While, therefore, Usury was strictly forbidden to Christians, the Jews were not molested; and from that era we may date the strong bias of the children of Israel to this species of trading, which was further strengthened and aggravated by the treatment they subsequently received in every country in Europe.

When it was further discovered that the prince of the pagan philosophers concurred with the divine legislator in condemning interest on the loan of money, it became a settled dogma, just as certain as the stability of the earth, that any Christian who lent out money at interest, cut off from himself all hope of salvation. Usury was one of the deadly sins charged upon the unfortunate Albigenses. Dante places the people of Cahors, a famous banking centre, as companions to those of the cities of the plain, in the *Inferno*.

The irresistible temptation of profit, however, induced many Christians to prefer seizing a present gain at the risk of a doubtful penalty. The active spirit of commerce demanded the use of Capital; and the instinctive sense of mankind rejected the absurdity that they who furnished the means and shared the risk of loss, should not also share in the profits; and numerous subterfuges were devised, so that while the name of Usury was avoided, the thing might be done.

Nowhere were the inconvenience and absurdity of the wicked nature of interest more strongly felt than at the fountain of infallibility itself, the Papal Court; and nowhere was more ingenuity shown to circumvent its own dogmas. A capital was collected for the purpose of lending to the poor for a certain time on pledges without interest. To forward these objects, the Popes dispensed to those who contributed to them, indulgences with liberal prodigality. Burdensome vows were allowed to be commuted into donations to lending-houses. A rich donation effaced the stain on the birth of the children of wealthy libertines. But as these establishments required the services of a staff of officials, and as there could be no profits to pay them a salary, the Popes endeavoured to induce their servants to forego mundane necessities and comforts, in consideration of an unlimited supply of metatemporal blessings.

Such an organisation as this, however, could be of no long endurance. If it was a charitable thing to advance money for nothing to persons after they had become poor, it was far more sensible to lend them money at a moderate interest to help them to trade, and to prevent them from becoming poor. Rich persons

found that Papal indulgences were but a poor return for hard cash; and as in the course of business the institution incurred some loss, they were obliged to borrow money at interest to pay their expenses. The Popes, therefore, determined to allow the lending-houses to receive interest for so much of their capital as was necessary to defray their expenses. When this breach was made, the next step was not long following. In order to attract a sufficient amount of Capital, those who advanced money were allowed to receive a moderate interest for its use, which was not entered on the balance sheet as "Interest"—that would have been damnable—but was concealed under the euphemism of "establishment charges." The Papal bull allowed it to be given *pro indemnitate*.

However cunningly and speciously this "artful dodge" was devised to do the thing they dared not name, the lynx-eyed divines soon saw through the trick, and a violent ferment immediately arose, and it was fiercely debated whether it was lawful to do evil, *i.e.* take interest, in order that good might come. When the tempest was at its height, it was quelled by a folly of equal magnitude with itself. The Pope issued a bull, declaring these holy mountains of piety—*sacri monti di pietà*—to be legal, and damning all who dared to doubt it. All scruples on the subject being effectually silenced in so satisfactory a manner, other cities hastened to follow the example, and establish lending-houses, and they became common throughout Italy in the fifteenth century. Notwithstanding, however, the Papal sanction they had received, many writers and preachers considered them to be criminal; and the dispute was revived with considerable warmth in the sixteenth century, until it was set at rest by Leo X., who, in the tenth sitting of the Council of the Lateran, issued a special bull, declaring lending-houses to be legal and useful, and that all who dared to preach, dispute, or write against them should be excommunicated. He also justified them on the broad principle, which established the propriety of interest, that those who received the benefit should share the burden—*qui commodum sentit onus quoque sentire debet*.

Notwithstanding the thunders of the Vatican, and the tempests which raged in the theological atmosphere regarding the sinful nature of interest, the practice flourished equally among the Christians as the Jews. The spiritual excommunications of the Church, and the temporal punishments of princes, were equally ineffectual to prevent men from following their natural instincts. Edward the Confessor enacted that anyone convicted of Usury should be stripped of all his possessions, and be declared an outlaw;

as he had heard the maxim at the French Court that Usury is the root of every crime. Every country in Europe enacted similar penalties, and the frequency of the denunciation proves the extension of the practice. Notwithstanding all these terrible penalties, the contest was vain, and several States were obliged to limit what they could not prevent. James I., of Aragon, in 1228, limited interest to 20 per cent. In the same year, at Verona, it was limited to 12½; and at Modena, in 1270, to 20 per cent. An ordinance of Philip le Bel, in 1311, allowed 20 per cent. after the first year of the loan. In 1336, Florence borrowed money to carry on the war against Mastino della Scala, and paid 15 per cent. Genoa paid 7 to 10 per cent. on its public debts. The Florentines opened money-lending houses in numerous places; their usual rate was 20 per cent., and not unfrequently 30 or 40 per cent. At the present day, the usual charge of the second-class bill brokers for discounting a tradesman's bill is a shilling in the pound for three months. This is discount at the rate of 20 per cent., or interest at the rate of 25 per cent.

Smith says that, in Bengal, money is frequently lent at 40, 50, or 60 per cent., and the succeeding crop is mortgaged for the payment. The most ordinary banking charges at the present day are 12 per cent., and often higher. This is owing to the very undeveloped state of banking in that country; and this shows what a stimulus it would give to the industry and wealth of India to organise an extended and solid system of banking there.

Calvin was the first great man to demonstrate the fallacy of the popular notions of the wickedness of Usury. Upon the question being formally submitted to his judgment, he said that it was nowhere forbidden in scripture. The sense of the precept of Christ had been perverted. The Law of Moses was political, and not to be stretched beyond what men and equity would bear. In various places the Hebrew word meant fraud in general, and could not be applied to Usury. He said that the Jewish laws and polity were adapted to the Jews only, and that modern society was totally different from that of the Jews. He treats the reasons of St. Ambrose and Chrysostom as of very slight weight, and then says:

“Money does not beget money! What does the sea? What does a house, for the letting of which I receive a rent? Does money truly grow from the roof and walls? But the land also produces; and something is brought from the sea which afterwards produces [or draws forth] money; and the convenience of a house

may be bought or exchanged for money. If, therefore, more profit can be made by trading than from the produce of any farm, is he, who has let some barren farm to an agriculturist, to be allowed to receive rent and profit, and another man not to be allowed to receive profit from money? And if anyone buys a farm with money, does not that money generate money every year? You would allow that the profit of the merchant comes from his diligence and industry. Who doubts that unemployed money is useless? or that he who asks a loan from me does not intend to keep it idle when he has got it? Now, in truth, that profit does not arise from the money, but from the produce. I, therefore, conclude that we are not to judge of Usury by any particular passage of Scripture, but only by the Law of Equity. This will be clearer by an example. Let us suppose some wealthy man with large possessions in farms and rents, but not much money. Suppose another man not so rich, nor of such large possessions as the first, but yet having more ready money. The latter being about to buy a farm with his own money, is asked for a loan by the wealthier man. He who makes a loan may stipulate for a rent for his money, and that the farm shall be mortgaged to him until the principal is repaid; but until it is repaid he will be content with the profit or usury. Why, then, shall the first contract without a mortgage, but only for profit of the money, be condemned, when the much harsher one of the annual rent, with a mortgage of his farm, is approved? And what else is it than to treat God like a child when we judge of things by mere words, and not from the nature of the thing itself? as if virtue and crime could be perceived from the form of the words?"

No one can but admire the daring good sense of this argument in the mouth of a divine, in defence of what was then considered one of the worst crimes men could be guilty of, and be amazed that such arguments made scarcely impression, even in Protestant England, for upwards of two hundred years.

Calvin put the whole subject on its true and common-sense footing. Money, it is true, does not of itself bear increase; but if it is employed in buying those things which do bear increase or profit, of course he who lends the money is entitled to a share of the increase. If a person employs his own money in agriculture or commerce, he is entitled to any profit he can make by its use; and if, having no money of his own, he borrows it from someone else, what possible crime can it be to give that person a share of the profits?

From the examples taken from so many countries, it would

appear that about 20 per cent. is the fair average profit which must be paid for transactions in money which are perfectly safe.

These rates, however, only held when considerable sums were borrowed, and in *le haute commerce*. When sums are advanced to costermongers, and persons who carry on the commerce of the streets, the rates are enormously higher. At Athens, these persons paid $1\frac{1}{2}$ obolus a day for a drachma, *i.e.* 25 per cent. per day, or at the rate of 9,125 per cent. and per annum.

Gerard Malynes says that a similar trade was carried on with money borrowed at the rate of 1d. per shilling per week, which is about 433 per cent. *per annum*.

Boisguillebert says that the small provision dealers of Paris thrive on money borrowed at the rate of 5 sous per week the crown, or more than 400 per cent. per annum, because, perhaps, they sold 5 crowns' worth of merchandise per day, on which they gained one half, or 50 per cent., which was at the rate of about 18,250 per cent. per annum; and if they could perform this operation five or six times a week, they could well afford to pay such interest to those who lent them the money.

Turgot cites the case of the same class of persons in his day, who carried on their trade with money borrowed at 173 per cent. per annum, to show the absurdity of Usury Laws.

The most remarkable instance, however, is that cited by M. Gustave de Puynode from a speech of a member of the last Legislative Assembly of France. He said, "Every morning the small provision dealers received a 5 franc piece to buy the objects, which they re-sold with a profit of 3 or 4 francs. In the evening they repay the 5 franc piece, and give 25 centimes in addition. They make no complaint of interest, which is yet at the rate of 1,800 per cent. per annum." Nor had they any reason to do so; for by borrowing this 5 franc piece they made 3 francs profit, out of which they only paid $\frac{1}{4}$ franc for interest. If, therefore, the rate of interest was 1,800 per cent. per annum, the rate of profit, assuming the gain to be 3 francs a day, was at the rate of 21,600 per cent. per annum. And interest which is only one-twelfth part of the profit is not unreasonable. And yet, by the law of France, it is still punishable to take more than 6 per cent. per annum!

The progress of just legislation on this subject must always be remarkable as an instance of the extraordinary *vis inertiae* of established law in this country, where no great popular passion is brought to bear on it, even when no great interests are enlisted in its favour, and where abstract justice and good sense are not made a popular

cry. In 1691, Locke published his *Considerations of the Consequences of Lowering the Interest of Money*, in which he demonstrated the utter futility of Usury Laws. Smith showed less than his usual judgment in advocating their retention. But his doctrine called forth Bentham's *Defence of Usury*, as splendid an example of an unanswerable argument as any in existence. It is said that Smith admitted that his opinions were mistaken; but they remained uncanceled in his work. The most eminent writers had pointed out not only their utter futility to effect their purpose, but their highly mischievous effect in aggravating the very evil they were intended to prevent. The experience of several commercial crises had demonstrated that in consequence of the law attempting to prevent persons paying more than 5 per cent. for a loan of money, they often had to pay 50, 60, and 70 per cent. by the methods they were forced to adopt. In 1819, they were investigated by a Parliamentary Committee, and condemned. Yet it was only in 1833 that the first breach was made in them, by exempting bills which had not more than three months to run from their operation; and by temporary extensions and prolongations, most other contracts were taken out of their operation. But it was not until 1854 that they were finally swept away from the Statute Book. Thus from their total demolition in argument till their total demolition in fact, a space of not less than 161 years elapsed. Such was the period it required even in this commercial country to abolish laws equal in absurdity to those of witchcraft. The last trial for witchcraft in Great Britain took place in 1736. The last case of usury in our law books was in 1856.

ISSUE.

To **Issue** an Instrument is to deliver it to some person who thereby acquires a Right of Action on it against all the parties to it.

If a person draws, accepts, or indorses a bill for the simple accommodation of another person, and without any consideration moving to him, and then *delivers* the bill to him, he draws, accepts, or indorses the bill as the case may be; but he does not **Issue** the bill. The bill is not **Issued** until it is delivered to some person who is entitled to sue all the parties to it.

It is usually supposed that the word Issue is restricted to paper documents. Thus a Bank of Issue is supposed to be only a bank which issues Notes; and that banks which do not issue Notes are

not Banks of Issue. But this doctrine is wholly inadequate and erroneous, and causes much misapprehension of the nature and effects of banking. When a banker purchases money, or Rights of Action from his customers, he does it exclusively by creating a Credit in his favour in his books, which is termed a **Deposit**. That is he **Issues** Rights of action to his customers, and gives them the right to transfer these Rights of Action to any other persons they please, and promises to pay the transferees as he would his own customers. The customers might formerly either ask the banker to give them his own Notes for such an amount of their Deposits as they required ; or transfer the Right of Action by Cheque. Now it is clear that the nature and effects of banking are exactly the same, whether Banking Credits are transferred by Notes or Cheques. Since 1844, only those banks which were issuing their own Notes at that date were permitted to continue to do so under strict limitations, and all new banks founded after that date were prohibited from issuing Notes ; and could only have their issues, or deposits, transferred by means of Cheques. In recent times Banks which issue their own Notes have been termed Banks of Issue, and those which do not do so are supposed not to be Banks of Issue, and to be Banks of Deposit. This, however, is a profound delusion. All Banks are Banks of Issue. The sole function of a Bank is to issue circulating Credits. All that the law has done is to restrict and prohibit one form of circulating this Credit. But it leaves the other form wholly untouched. Thus Banks have now the right of purchasing Rights of Action, or Debts, by means of creating Debts of their own to any amount they please. Now these **Debts**, or **Deposits**, are all **Issues**, because when once issued their holders have a Right of Action against the banker. That is to say all banks have still the right of unlimited Issues as much as they ever had, which may be somewhat surprising news to some people.

LABOUR.

Labour in Economics is any exertion of ability or **Thought** which is wanted, demanded, and paid for.

The Economists steadfastly refused to admit that Labour is Wealth, because they alleged that to admit Labour to be Wealth would be to admit that Wealth can be created out of nothing ; and they said that *ex nihilo nihil fit*.

But Aristotle laid down the definition—" *By the term Wealth we*

mean **Anything** whatever whose value can be measured in Money."

Now Labour can neither be seen nor handled, nor is it transferable from hand to hand; but it may be bought and sold; *its value may be measured in Money*; and therefore it is Wealth by Aristotle's definition.

There is a very remarkable work of antiquity extant, which is the earliest treatise that we are aware of, discussing an Economical question. It is a dialogue called the *Eryxias*, or *On Wealth*, and is frequently bound up with the works of Plato. It is attributed to Æschines Socraticus, one of the most distinguished disciples of Socrates. Critics, however, unanimously pronounce it to be spurious, without being able to assign it to any definite author. High authorities consider that it was probably written in the early Peripatetic period.

This dialogue is to the following effect: The Syracusans had sent an embassy to Athens, and the Athenians had sent a return embassy to Syracuse. As the Athenian ambassadors were entering the city on their return, they met Socrates and a party of his friends, with whom they entered into conversation. Erasistratus, one of the envoys, said that he had seen the richest man in all Sicily. Socrates immediately started a discussion on the nature of Wealth. Erasistratus said that he thought upon the subject as everyone else did, and that to be wealthy meant to have much money. Socrates asked him what kind of money he meant, and he instanced the money of several countries. At Carthage they used as money leather discs, in which something was sewn up—but nobody knew what it was—and he who possessed the greatest quantity of this money at Carthage was the richest man there. But at Athens he would be no richer than if he possessed so many pebbles from the hill. At Lacedæmon they used iron as money, and that useless iron. He who possessed a great quantity of this iron at Lacedæmon would be rich; but anywhere else it would be worth nothing. In Æthiopia, again, they used carved pebbles as money, which were of no use anywhere else. Among the nomade Scythians a house was not Wealth, because no one wanted a house, but greatly preferred a good sheepskin cloak. He showed that if anyone could live without meat and drink, they would not be Wealth to him, because he did not want them.

Socrates showed that Money is only Wealth because it is **Exchangeable**; because it can purchase other things. Where

it is not exchangeable, where it cannot purchase other things, it is not Wealth.

He then asked why some things are Wealth, and other things are not Wealth? Why are some things Wealth in some places, and not in other places? And at some times, and not at other times? He showed that whether a thing is Wealth or not, depends entirely upon human Wants and Demands; that everything is Wealth which is Wanted and Demanded. That things are only Wealth, *χρήματα*, where and when they are *χρήσιμα*, that is, where they are Wanted and Demanded; and that nothing is Wealth when and where it is not Wanted and Demanded.

Thus we see that though some persons might be puzzled at the meaning of the word Wealth, there is no possibility of mistake when we refer to the Greek, because *χρῆμα*, which is one of the most usual words in Greek for Wealth, comes from *χράομαι*, to want or demand. Consequently the word *χρῆμα*, Wealth, means simply anything whatever which is wanted and demanded, no matter what its nature or its form may be.

It is, then, human Wants and Desires which alone constitute anything Wealth. Anything whatever which people want and demand, and are willing to pay for, is Wealth. Everything, therefore, which can be bought and sold is Wealth, whatever its form or its nature may be; and anything which no one wants or demands is not Wealth.

Socrates shewed that Gold and Silver are only Wealth because they enable us to obtain or purchase what we want and demand. And that if anything else will enable us to purchase what we want and demand in the same way that Money does, it is Wealth, for the very same reason that Gold and Silver are.

He then instanced persons who gained their living by giving instruction in the various Sciences. He said that persons are able to purchase what they want by giving this instruction, just as they are able to do with Gold and Silver. Consequently, he said that the Sciences are Wealth—*αἱ ἐπίστημαι χρήματα οὔσαι*; and that those who are masters of such Sciences are so much the richer—*πλουσιώτεροί εἰσι*.

Now in instancing the Sciences as Wealth, that is of course a general term for **Labour**; because Labour in Economics is any exertion of human ability or **Thought**, which is wanted, demanded, and paid for. Thus the author of this dialogue showed that **Labour is Wealth**.

Socrates shewed that the Mind has wants and demands as well as

the body ; and that the things which are wanted and demanded for the mind and are paid for, are equally Wealth, as those things which satisfy the wants and demands of the body and are paid for.

Thus each of the great professions, Law, Physic, Surgery, Engineering, and many others, are great Estates which produce Utilities, which are as much Wealth as the Utilities which satisfy the demands of the body.

Now Labour cannot be seen nor handled ; it cannot be transferred by manual delivery ; but it may be bought and sold ; its *Value may be measured in Money* ; therefore it satisfies Aristotle's definition of Wealth. If any person wants any other person to do any Labour or Service for him, and pays him for it, its *value is measured in money*, as exactly as if it were a material chattel. Suppose that a person gives fifty guineas for a watch or a horse, and also fifty guineas for the opinion of an eminent advocate ; the value of the opinion is measured in money as exactly as the value of the watch or the horse ; and, therefore, they are all equally Wealth.

So if a person earns an income of some thousands a year as the Manager of a great mercantile company—Banking, Insurance, Railway, or any other—his Services are as much Wealth to him, as corn or cattle to a farmer ; or goods to any other trader.

Hence the author of this dialogue showed that Personal Qualities in the form of Labour or Services, are Wealth ; which no one in subsequent ages perceived till Adam Smith ; and thus he anticipated by about 2,176 years one of the great extensions which Adam Smith gave to the Science.

Modern Economists include Labour under the term Wealth.

It has been shown that the Economists expressly excluded Labour or Services from the term Wealth.

But in accordance with the author of the *Eryxias*, Smith enumerates under the term Fixed Capital—"The acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such Talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a Capital fixed and realised as it were in his person. These Talents, as they make part of his Fortune, so they do likewise that of the society to which he belongs."

So also he says—"The property which every man has in his own Labour, as it is the original foundation of all other property (?) so it

is the most sacred and inviolable. The Patrimony of a poor man lies in the strength and dexterity of his hands."

J. B. Say dwelt with emphatic force on the doctrine that Personal Qualities are Wealth. Among many other passages he says (*Cours, Considérations Générales*)—"He who has acquired a Talent at the price of an annual sacrifice, enjoys an accumulated Capital, and this Wealth, though **Immaterial**, is nevertheless so little fictitious, that he daily exchanges the exercise of his art for gold and silver."

"Since it has been proved that **Immaterial Property**, such as **Tenants** and acquired Personal Abilities, form an integral part of Social Wealth. . . .

"You see that Utility, under whatever form it presents itself, is the source of the value of things; and what may surprise you is that this Utility can be created, can have Value, and become the subject of an Exchange without being incorporated with any material object. A manufacturer of glass places value in sand; a manufacturer of cloth places it in wool; but a Physician sells us a Utility without being incorporated in any matter. This Utility is truly the fruit of his studies, his Labour, and his Capital. We buy it in buying his opinion. It is a real product, but **Immaterial**."

Say calls all species of Labour and Services **Immaterial Wealth**, because they are vendible products, but not embodied in any matter. This is an excellent name, and we shall adopt it to distinguish this order of Economic Quantities from material things and abstract rights.

We must, however, guard against an erroneous expression of Say's. He says that the manufacturers of glass and sand place value in sand and wool. This, however, is an error. The artisans place their Labour in sand and wool, but it is the *Demand* of the consumer which alone gives value to the glass and the cloth. So a physician may have all the medical knowledge in the world. But if no one was ill there would be no use and no demand for his services, and therefore they would have no value. It is the illness, or the Demand of the patient, which alone gives value to the knowledge and services of the physician.

Senior has a long and eloquent passage to the same effect (*Political Economy*, p. 10)—"If the question whether Personal Qualities are articles of Wealth had been proposed in classical times, it would have appeared too clear for discussion. [We have already seen that the question was discussed in classical times.] In Athens everyone would have replied that they, in fact, constituted

the whole value of an *ἐμψυχον ὄργανον*. The only differences in this respect between a freeman and a slave are—first, that the freeman sells himself, and only for a period, and to a certain extent: the slave may be sold by others, and absolutely; and, secondly, that the Personal Qualities of the slave are a portion of the wealth of his master: those of the freeman, so far as they can be made the subject of exchange, are part of his own Wealth. They perish, indeed, by his death, and may be impaired or destroyed by disease, *or rendered valueless by any change in the custom of the country which shall destroy the Demand for his services* [thus Senior sees that value depends on *Demand*, and not upon *Labour*]; but subject to these contingencies they are **Wealth**, and Wealth of the most valuable kind. The amount of revenue derived from their exercise in England far exceeds the rental of all the lands in Great Britain.”

So also he says—“Even in our present state of civilisation, which, high as it appears by comparison, is far short of what may be easily conceived, or even of what may be confidently expected, the **Intellectual and Moral Capital** of Great Britain far exceeds all the **Material Capital**, not only in importance, but in productiveness. The families that receive mere wages probably do not form a fourth part of the community; and the comparatively larger amount of wages, even of these, is principally owing to the **Capital** and Skill with which their efforts are assisted and directed by the more educated members of the society. Those who receive mere rent, even using that word in its largest sense, are still fewer; and the amount of rent, like that of wages, principally depends on the knowledge by which the gifts of Nature are directed and employed. The bulk of the national revenue is Profit, and of that Profit the portion which is merely interest or Material Capital probably does not amount to one-third. The rest is the result of **Personal Capital**, or, in other words, of Education.

“It is not in the accidents of the soil, in the climate, in the existing accumulation of the instruments of production, but in the quantity and diffusion of this **Immaterial Capital** that the wealth of a country depends. The climate, the soil, and the situation of Ireland have been described as superior, and certainly not much inferior, to our own. Her poverty has been attributed to the want of Material Capital; but were Ireland now to exchange her native population for seven millions of English North-countrymen, they would quickly create the capital that is wanted; and were England, north of the Trent, to be peopled exclusively by a million of

families from the West of Ireland, Lancashire and Yorkshire would still more rapidly resemble Connaught. Ireland is physically poor, because she is morally and intellectually poor. And while she continues uneducated, while the ignorance and the violence of her population render persons and property insecure, and prevent the accumulation, and prohibit the introduction of Capital, legislative measures, intended solely and directly to relieve her poverty, may not, indeed, be effectual, for they may aggravate the disease, the symptoms of which they are meant to palliate, but undoubtedly will be productive of no permanent benefit. **Knowledge** *has been called power: it is far more certainly* **Wealth**. Asia Minor, Syria, Egypt, and the northern coast of Africa were once among the richest, and are now among the most miserable, countries in the world, simply because they have fallen into the hands of a people without the sufficiency of the Immaterial sources of Wealth to keep up the Material ones."

So Mill says (*Princ. of Pol. Econ.* bk. i. ch. iii.)—"The skill and energy and the perseverance of the artisans of a country are reckoned part of its Wealth no less than its tools and machinery"—and why not the skill and energy and perseverance of other classes as well as of artisans? He also says—"Acquired capacities, which exist only as means, and have been called into existence by labour, fall exactly, as it seems to me, within that designation."

So Madame Campan inscribed over the Hall of Study in her establishment at St. Germain:

"**Talents** are the ornament of the rich and the **Wealth** of the poor."

So Cardinal Newman says—"If Gold is Wealth, power, influence, and if Coal is Wealth, power, influence, so is Knowledge."

Thus Knowledge, Labour, Services, though they can neither be seen nor handled, nor transferred by manual delivery, can be bought, sold, and exchanged; *their value can be measured in Money*; they possess the quality of Exchangeability; and, therefore, they are Wealth.

And if Knowledge, Labour, and Services, by the acknowledgment of all Economists, are Wealth, what becomes of the doctrine with which text-books of Economics are still loaded and infected—that all Wealth is the product of land, labour, and Capital?

It is, therefore, now admitted by all Economists of note that the industrial faculties of all the people are National Wealth.

LEND—LOAN.

It is unfortunate for literary Economists that the words "**Lend**" and "**Loan**" in English are ambiguous, and are used to denote two operations of an essentially distinct nature.

When persons hear for the first time such an expression as "**Credit is Capital**," they are apt to be startled; and they think that such a doctrine is as much as to say that if one person "**lends**" another his book, his watch, or his horse, that makes two books, or two watches, or two horses.

The whole difficulty arises from a want of knowledge of Mercantile Law; and from not being aware that, unfortunately, the English words "**Lend**," "**Loan**," and "**Borrow**" are ambiguous, and are used to denote two operations of an essentially distinct nature.

There are two kinds of Rights—(1) the Right of absolute Property; (2) the Right of mere temporary Possession.

And there are two distinct kinds of "**Loan**"—the one in which the Right of Possession only for a limited time is given to the "**Borrower**," but the Right of Property remains in the "**Lender**," and there is no new creation of Property, and the identical thing "**lent**" is returned to the "**Lender**."

The other, in which the "**Borrower**" acquires the actual Right of Property in the thing "**lent**," and the "**Lender**" acquires in exchange for it only the Right, or Property, to demand only an **Equivalent** for the thing "**lent**," both in quantity and quality, but not the identical thing "**lent**." In this class of "**Loan**" there is always a new creation of Property.

The Commodatum, or τὸ χρησάμενον.

There are some things which can be lent, and the borrower can enjoy their use without acquiring the actual Property in them; and after having enjoyed their use, he can restore the identical things "**lent**" to their owner.

Thus, if a person "**lends**" his horse, or book, or watch, or his carriage to his friend, his friend can ride the horse, or read the book, or use the watch or the carriage, without acquiring the Property in them, which remains with the "**lender**"; and after he has enjoyed their use, he can restore the identical horse, or book, or watch, or carriage to its owner.

In such a case, the “lender” only grants a certain limited Right of “Possession” and “Use” of the thing lent to the “**borrower**”; but he does not cede the Right of Property in them to him. He retains in himself the Right of Property and Possession in the thing “lent,” and can reclaim it at any time he pleases, without any notice to the “borrower.” In such cases there is no Sale or Exchange; and there is no new Property created. In such cases the relation of Creditor and Debtor does not arise between the parties. And there being no Sale or Exchange, there is no Economic phenomenon; consequently such transactions, not being acts of commerce, do not enter into the Science of Economics.

Such a “loan” is termed, in Roman Law, a **Commodatum**, and in Greek Law, τὸ χρησάμενον, because the “**Use**” only of the thing “lent” is granted to the “borrower,” but not the “**Property**” in it.

The Mutuum—τὸ δάνεισμα or δάνειον.

But there is another kind of “**Loan**,” in which the things “lent” cannot be enjoyed unless they are consumed, destroyed, or alienated.

Thus, if a person “borrows” such things as bread, wine, coals, oil, meat, or other things of a similar nature, he cannot enjoy their use without consuming or destroying them; and they are both lent and borrowed with the knowledge and consent of both parties, for the purpose of being consumed and destroyed.

Hence, from the very nature of the case, the “borrower” must acquire the Right of Property in such things when “lent”; and what he undertakes to do is to return, not the *identical* things lent, but an **Equivalent** amount of other things of the same nature, equal in quantity and quality to the things “lent.”

So when a person “borrows” Money, he cannot enjoy its use unless he is able to exchange it away for other things. Hence the person who borrows Money must, from the very necessity of the case, acquire the Property in it. And what he undertakes to do is, not to restore the identical Money lent, but an equivalent amount of Money, at the stipulated time.

So if a person borrows a postage stamp, he can make no use of it without affixing it to a letter, and so destroying it. Hence he must acquire the Property in it. And what he undertakes to do is, not to restore the identical stamp lent, but another of equal value.

In all cases, therefore, of the "Loan" of such things as bread, wine, oil, meat, coals, &c., Money, and also of postage stamps, and things of a similar nature, the lender cedes the Property in the thing "lent" to the borrower; and he acquires in exchange the Right to demand, and the borrower incurs the Personal Duty to render, an equivalent amount of the things "lent," but not the identical things.

In all such cases a new Property is created; a Contract or an Obligation is created between the Lender and the Borrower; and they stand in the relation of Creditor and Debtor.

All such transactions are Sales or Exchanges; they are all acts of commerce, or Economic phenomena; and they all enter into the Science of Economics.

A "Loan" of this nature is termed, in Roman Law, a **Mutuum**, and in Greek Law a δάνειον or δάνεισμα.

To contract a loan of this nature is **Mutuare** or δανείζειν.

The word Loan, therefore, comprehends two transactions of an essentially distinct nature; but the essential feature of a "Loan" is that it is always the same person who restores the identical thing lent, or an equivalent.

The Roman Jurists said that **Mutuum** is derived from *quod de meo tuum fit*—because from being my Property it becomes yours. Modern scholars, however, repudiate this etymology, however plausible it may seem. The Romans and the Greeks knew very little of their own language.

Modern scholars say that *Mutuum* is connected with *mutare*, to exchange; as *deciduus* is with *decido*; and *dividuus* is with *divide*.

But though the etymology may be fanciful, as are so many others given by Roman and Greek writers, it exactly expresses the fact. In the Loan of the *Mutuum* there is always an exchange of Properties. In all cases of the *Mutuum*, or the δάνειον, the Property in the thing lent is ceded to the borrower; the relation of Creditor and Debtor is created between them; and the Right which the Creditor acquires to demand back an equivalent in exchange for the thing lent, is the **Credit** or the **Debt**; or as Ortolan says, the Price of the thing lent.

The reader must therefore observe that every Loan of Money whatever, no matter between what parties, public or private, is a **Mutuum**; and is a Sale or an Exchange; an act of commerce; and therefore an Economic phenomenon.

Theophilus on the Mutuum, δάνειον or δάνεισμα; and the Commodation or τὸ χρησάμενον.

This distinction is so important that we may cite a passage from the paraphrase of the *Institutes of Justinian*, by Theophilus, one of the Professors of Law who were charged with the compilation of the *Institutes*, because it is more full and distinct than the corresponding passage in the *Institutes* :

“A real Obligation is contracted by an act, or by the manual delivery of something counted out; and this includes the **Mutuum**, or the δάνειον. A thing is a **Mutuum** where the Property in it passes to the person who receives it; but he is bound to restore to us, not the identical thing delivered, but another of the same Quality and Quantity. I said so that the receiver becomes proprietor of it, that I might exclude the **Commodatum** and the **Depositum**; for in these latter the receiver acquires no Property. But he must be bound to us to exclude the **Donation**; for he who receives one acquires the Property, but is not bound to us. I said he must restore not the identical things lent, but others of a similar Quality and Quantity, that I might not deprive him of the use of the **Mutuum**. For a person takes a **Mutuum**, that he may use the things for his own purposes, and return *others* instead of them. For if he were obliged to give back the same things, it would be useless to borrow them.

“But all things are not taken as *Mutua*; but only those which consist in weight, number, and measure. In *weight*, as gold, silver, lead, iron, wax, pitch, tin; in *measure*, such as oil, wine, and corn; in *number*, such as Money; and in short, whatever we deliver with this intent in number, weight, and measure, so as to bind the receiver to return to us, not the *same* things, but others of the same Nature and Quantity. Whence also it is called **Mutuum**; because it is transferred by me to you, with the intent that it should become your Property (*quod de meo tuum fit*).

“But the real Obligation includes the **Commodatum**; as if any one were to ask me to lend him a book, and I lend it But the **Commodatum** differs widely from the **Mutuum**. For the *Mutuum* transfers the Property; but the *Commodatum* does not transfer it; and therefore the borrower (*Commodatarius*) is bound to restore the very thing lent.”

So it is said in Roman Law (*Digest*, xii. 1, 2, 2)—“But it is called giving a *Mutuum*, because from being my Property it becomes

yours (*quod de meo tuum fit*) ; and, therefore, if it does not become your Property no Obligation is created."

But on the contrary with respect to the *Commodatum* (*Digest*, xiii. 6, 8, 9)—"We retain the Property and the Possession of the thing lent (*rei commodatæ*) No one by lending a thing (*commodando*) gives the property in it to him who borrows it."

Thus the whole misconception, which is so common among English writers, has arisen from the English words "Lend," "Loan," and "Borrow," being used to denote two operations of essentially distinct natures.

The French language is equally faulty : the words *louer*, *emprunter*, and *emprunt* are equally applied to both kinds of Loan.

But the distinction is clearly pointed out both in Roman and Greek Law, and the Latin and Greek languages have distinct words for each operation.

In the *Code Napoléon* the *Commodatum* is termed *Prêt à usage*, and the *Mutuum*, *Prêt de consommation*.

All commercial Loans are *Mutua*, not *Commodata* : every Loan of Money is, in reality, a Sale or Exchange, in which a **New Property is created**, which is called a **Credit**, or a **Debt**. And when the Loan is repaid it is another exchange, by which the New Property is extinguished.

No one who had the simplest knowledge of the elementary principles of Roman and Greek Law, or of Mercantile Law, would ever have committed the mistake of confounding the distinction between the Loan of Money and the Loan of an ordinary chattel, such as a horse, or a book, or a watch.

Hence these things can only be the subject of a *Mutuum*, which consist *in pondere, numero, et mensurâ*, or which can be estimated generically in weight, number, and measure. Such things are termed in Roman Law **Quantitates**, because equal quantities of bread, wine, oil, coals, etc., are as good as another equal quantity of the same things of the same quality ; or one sum of 100 sovereigns is equal to another sum of 100 sovereigns ; or one postage stamp is always equal to another of the same denomination.

But also the *Digest* says *mutuâ vice funguntur* : one quantity serves the same purpose as another quantity. From this expression mediæval jurists termed them *Res Fungibiles* ; and in modern English Law they are termed *Fungibles*.

In English Law the former kind of Loan, or the *Commodatum*, is said to be returnable *in specie*, because the identical things lent are returned ; the latter kind of Loan, or the *Mutuum*, is said to be

returnable *in genere*, because only things of the same kind are returned.

It is much to be regretted that the English language has not two separate words to denote these two kinds of Loan, like the Latin and the Greek, because the double meaning of Lend, Loan, and Borrow has been the cause of great misconception among uninformed writers as to the nature of Credit and Banking.

MARKET PRICE OF GOLD AND SILVER.

The Mint Price of Gold and Silver is merely the number of the Coins into which a certain quantity of Gold or Silver is divided. Consequently, so long as the Coins retain their full legal weight of metal, they are always of the value of that quantity of Bullion.

But when Coins have been some time in circulation they must necessarily lose some of their weight from the mere wear and tear of daily use, even if they be not subjected to any evil practices, such as clipping, which used formerly to be done to a great extent before the system of milling was adopted.

But these Coins may circulate for a considerable time in a country, and lose a good deal of their weight without losing their current value. People are so accustomed to the sight of a particular coin that, unless they be money dealers, they do not stop to inquire too curiously whether it is of the legal weight or not. In fact, when coins have been a long time in use, few persons know what their legal weight is. Many, for instance, do not associate the idea of a pound with any particular weight of bullion; and thus, in exchange for products, coins may pass at their nominal value long after they have lost much of their legal weight.

As Posthumus says in *Cymbeline*—

“ ’Tween man and man they weigh not every stamp,
Though light take pieces for the figure’s sake.”

But when coins are exchanged for bullion the case is different. The value of coins is measured weight for weight with bullion; consequently, if the coins have lost their legal weight, a greater number of them must be given than if they were of full legal weight. Thus, if the Mint Price of Silver were 5s. 2d. per ounce, that quantity of coin ought, by law, to weigh an ounce. But if the coins have lost their legal weight, it is clear that more than 5s. 2d. must be given to buy an ounce of silver. It might, perhaps, take 6s. of the current coin, or even more, to buy an ounce of silver.

The quantity of coin at its full legal weight, which is equal in weight to an ounce of silver, is termed its **Mint Price**, but the quantity of the *Current* coin, which is actually equal to it in weight, is called its **Market Price**; and as, if the current coins have lost their legal weight, *more* of them must be given than if they were of full legal weight, the Market Price will apparently be higher than the Mint Price; and this is called *a Rise of the Market Price above the Mint Price*.

Suppose that the Mint Price of Silver is 5s. 2d. per ounce, and the Market Price of Silver is 6s. per ounce, that means that 6s. of the current coin is only equal in weight to what 5s. 2d. ought to be, and therefore the current coin is deficient about one-sixth of its legal weight: thus it is clear that the rise of the Market Price above the Mint Price is due to the Depreciation of the Coinage.

Hence we obtain this fundamental law of the Coinage :

*When the **Market Price** of Bullion rises above the **Mint Price**, the **Excess** is the **Proof** and the **Measure** of the **Depreciation** of the **Coinage**.*

In fact, the apparent rise of the Market Price of Bullion is due exactly to the same cause as has made the Mint Price of Silver apparently rise from £1 in the days of William I. to £3 6s. at the present time. It is merely that the current coin has lost its legal weight, or more coins of the same name have been cut out of the Pound weight of Bullion.

The Market Price of Bullion could never fall below the Mint Price unless there were more Bullion in the coins than there ought to be by law; and in such a case, if it could be imagined to happen, the difference of the Market Price below the Mint Price would indicate the *excess* of the coins above their legal weight.

THE MINT PRICE OF GOLD AND SILVER.

As the very purpose of coining is to certify that the pieces of Bullion are of a certain definite weight and fineness, it is evident that a fixed weight of Bullion must be divided into a fixed number of Coins.

*The **Number** of Coins into which a given **Quantity** of Bullion is divided by Law is called the **Mint Price** of that **Quantity** of Bullion.*

The Mint Price of Bullion is, therefore, simply the amount of Coin which is equal to any quantity of Bullion, weight for weight.

By the law at present in force, forty pounds' weight of Standard Gold Bullion are divided into 1,869 coins, called Sovereigns or Pounds: hence one pound weight of Gold Bullion is coined into £46 14s. 6d.; or, as the value of Gold is measured by the ounce, one ounce of Gold Bullion is coined into £3 17s. 10½d.; and this is termed the **Mint Price** of Gold.

The legal weight of the Pound, or Sovereign, is 5 dwts. $3\frac{1}{8}\frac{1}{2}$ grns., or $113\frac{1}{8}\frac{1}{2}$ grns. of pure Gold. Sovereigns which fall below 5 dwts. $2\frac{3}{4}$ grns., and half-sovereigns which fall below 2 dwts. $13\frac{1}{2}$ grns., cease to be legal tender.

In the time of William the Conqueror the pound weight of Silver Bullion was coined into 240 pennies: hence the Mint Price of Silver was £1 per pound. But in the time of Elizabeth the pound weight of Silver was coined into 744 pennies: hence, as 240 pennies were still called a £, the Mint Price of Silver then became £3 2s. a pound, or 5s. 2d. an ounce.

To alter the Mint Price of Bullion merely means an Alteration in the Legal Weight of the Coin.

To suppose that the Mint Price of Bullion could vary is manifestly as great an error as to suppose that a hundredweight of sugar could be a different weight from 112 separate pounds' weight of sugar; or that the quantity of wine in a hogshead could differ in quantity from the same quantity of wine in bottles; or that a loaf of bread could alter in its weight by being cut up into slices.

It is not an Economic Error to Fix the Mint Price of Bullion.

We must now say a word as to an error which is by no means infrequent. It is now acknowledged that it is a great Economic error to fix the Price of any articles. It used formerly to be the custom to fix by law the price of multitudes of commodities and wages. But all such attempts have long been abandoned as futile and mischievous. It is sometimes contended that it is an equal error to **Fix the Mint Price** of Gold.

But those who affirm this, overlook a very important consideration. The word "Price," except in the single instance of "Mint Price," always denotes the quantity of the article which is used as a measure, which is given for an article of a different nature. Thus we may say that the Price of a bushel of corn is 5s.; where the Silver, the substance in which the Price of the corn is measured, is of a different nature from the corn.

But in the expression "Mint Price" of Bullion, it always means

the Value of Bullion in Coin of the *same* metal. Thus the Mint Price of Gold Bullion means its weight in Gold Coin; the Mint Price of Silver Bullion means its weight in Silver Coin.

Hence by the very definition, the Mint Price of Gold and Silver Bullion merely means the identical quantity, or weight, of Gold and Silver Bullion; and by the very nature of things the Mint Price of Bullion is a fixed quantity. If the law requires an ounce of Gold to be coined into £3 17s. 10½d., that amount of Coin must be of the same value as an ounce of Gold, no matter whether Gold becomes as plentiful as iron, or as scarce as diamonds; for that quantity of Coin is always equal in weight to an ounce of bullion, whatever be the abundance or scarcity of Bullion. The value of Gold may vary with respect to other things; it may purchase more or less bread, or wine, or meat, at one time than another; but it is absolutely impossible that an ounce weight of Gold in the form of Coin can differ from an ounce weight of Gold in the form of Bullion, so long as there is no cost in changing the metal from one form into the other. To suppose that it could, would be as irrational as to suppose that because bread became very scarce or very abundant, it could differ from itself in weight when cut up into slices; or that a cask of wine could differ from itself when drawn off into bottles.

The Mint Price of Gold, then, is nothing more than a public declaration of the weight of metal which the Law requires to be in the Coin. An alteration in the Mint Price of Bullion means an alteration of the standard weight of the Coin; and would be the same thing in principle as an alteration in the standard yard measure. Those who ridicule the idea of having the Mint Price of Gold fixed, should, to be consistent, ridicule the idea of having the standard yard measure fixed.

MONEY.

In the early ages of the world there was no such thing as Money. When persons traded they exchanged the products directly with each other; as is the custom at the present day with savage people.

Thus in *Iliad* vii. 468, we have:

Νῆες δ' ἐκ Λήμνοιο παρέσταν οἶνον ἄγουσαι

.
 ἐνθεν ἄρ' οἰνίζοντο κάρη κομβῶντες Ἀχαιοί,
 ἄλλοι μὲν χαλχῷ, ἄλλοι δ' αἰθωνι σιδήρῳ,
 ἄλλοι δὲ ῥινοῖς, ἄλλοι δ' αὐτῇσι βόεσσιν,
 ἄλλοι δ' ἀνδραπόδεσσι

From Lemnos' isle a numerous fleet had come,
 Freighted with wine
 All the other Greeks
 Hastened to purchase, some with brass, and some
 With gleaming iron ; some with hides,
 Cattle and slaves.

This exchange of products against products is termed **Barter**. And the inconveniences of this mode of trading are obvious. What haggling and bargaining it would require to determine how much leather should be given for how much wine ! How many oxen, or how many slaves !

In the Homeric poems there is not the faintest allusion to anything of the nature of Money. But even in those days it had been discovered that it would greatly facilitate commerce, if the products to be exchanged were referred to some common measure of value.

There are several passages in the *Iliad* which show that while commerce had not advanced beyond Barter, such a standard of reference was used. We find that various things were frequently estimated as being worth so many oxen. Thus in *Iliad*, ii. 448, Pallas's shield, the Ægis, had one hundred tassels, each of the value of one hundred oxen. In *Iliad*, vi. 231, Homer laughs at the folly of Glaucus, who exchanged his golden armour, worth one hundred oxen, for the bronze armour of Diomedes, worth nine oxen. In *Iliad*, xxiii. 703, Achilles offered as a prize to the winner in the funeral games in honour of Patroclus, a large tripod, which the Greeks valued among themselves at twelve oxen ; and to the loser a female slave, which they valued at four oxen.

But it must be observed that these oxen did not pass from hand to hand like Money. The state of Barter continued ; just as at the present day it is quite common to exchange goods according to their value in Money, without any actual Money being used.

On the Necessity for Money.

The necessity for Money arises from a different cause. So long as the products were equal in value, there would be no need for Money. If it could always happen that the exchanges of products or services were equal, there would be an end of the transaction.

But it would often happen that when one person required some product or service from another person, that other person would not require an equal amount of product or service from him in return, or even, perhaps, none at all.

If, then, such a transaction took place between persons with such an **Unequal** result, there would remain over a certain amount of product or service, due from the one to the other.

And this would constitute a **Debt**; that is to say, a **Right**, or **Property**, would be created in the person who had received the lesser amount of service or product, to demand the **Balance** due at some future time. And at the same time a **correlative Duty** would be created in the person of the other, who had received the greater amount of product or service, to pay or render the balance due when required.

Now, among all nations and persons who exchange or traffic with each other, this result must inevitably happen; persons want some product or service from others, while those others want either not so much, or even, perhaps, nothing at all, from them. And it is easy to imagine the inconveniences which would arise if persons could never get anything they wanted, unless the persons who could supply these wants wanted something equal in value in return at the same time.

In process of time all nations hit upon this plan; they fixed upon some material service, which they agreed to make always exchangeable among themselves, to represent the amount of **Debt**.

That is, if such an **Unequal** exchange took place among persons, so leaving a balance due from one to the other, the person who had received the greater amount of service or product gave an equivalent quantity of the **Universally Exchangeable Merchandise** to make up the balance, so that the person who had received the lesser amount of service or product might obtain an equivalent from someone else.

Suppose a wine dealer wants bread from a baker, but the baker wants either not so much wine, or even no wine at all, from the wine dealer. The wine dealer buys the bread from the baker, and gives him in exchange as much wine as he wants, and makes up the balance by giving him an amount of this **Universally Exchangeable Merchandise** equivalent to the deficiency; and if the baker wants no wine at all, he gives him the full equivalent of the bread in this **Merchandise**.

The baker wants, perhaps, meat or shoes, but not wine. Having received this **Universally Exchangeable Merchandise** from the wine dealer, he goes to the butcher or the shoemaker, and obtains from them the equivalent of the bread he has sold to the wine dealer. Hence the satisfaction that was due to him from the wine dealer is paid by the butcher or shoemaker.

This Universally Exchangeable Merchandise is termed **Money**; and these considerations show its fundamental nature. Its function is to represent the **Debts** which arise from unequal exchanges among men, and to enable persons who have rendered any sort of services to others, and have received no equivalent from them, to preserve a record of these services, and of their **Right** and **Title** to obtain an equivalent product or service from someone else, when they require it.

It must, therefore, be observed that Money performs a double function; it is an **Equivalent** for the product or service due at the time of the Exchange, and it is also a **Right** or **Title** to obtain an equivalent Satisfaction at some future time due to the possessor. And it is to this double function that much of the complexity of the subject of Money is due.

*Aristotle, Bishop Berkeley, the Economists, Adam Smith,
Thornton, Bastiat, Mill, and Jurists, have seen the true
Nature of Money.*

The true Nature of **Money** is now apparent. It is a **Right** or **Title** to demand a product or service from some one else.

Now when a person accepts Money in exchange for products or services rendered, he can neither eat it nor drink it, nor clothe himself with it; nor is it any species of Economic satisfaction for the service he has done. He only agrees to accept it in exchange for the services he has rendered, because he believes, or has confidence, that he can purchase some satisfaction which he does require, at any time he pleases. **Money** is therefore what is termed **Credit**.

A whole series of writers, from the earliest times, have perceived that the true nature of **Money** is a **Right** or **Title** to acquire a satisfaction from some one else; *i.e.* a **Credit**.

Thus Aristotle says (*Nicomach. Eth.*; *B.V.*): ὑπὲρ δὲ μελλούσης ἀλλαγῆς (εἰ νῦν μηδὲν δεῖται, ὅτι ἔσται ἐὰν δεθῇ) τὸ νόμισμα οἶον Ἑγγυητὴς ἐστὶν ἡμῖν. δεῖ γὰρ τοῦτο φέροντι εἶναι λαβεῖν.

"But with regard to a future Exchange (if we want nothing at present, that it may take place when we do want it), Money is as it were our Security. For it is necessary that he who brings it should be able to get what he wants."

So a London Merchant, F. Cradocke, in the time of the Commonwealth, says—"Having now pointed out the inconvenience of these metals (Gold and Silver) in which the medium of commerce, or **Universal Credit**, hath universally been placed. . . .

“ Now that **Credit** is as good as **Money** will appear ; it is to be observed that **Money** itself is nothing but a kind of **Security**, which men receive upon parting with their commodities, as a ground of **Hope** or **Assurance**, that they shall be repaid in some other commodity ; since no man would either sell or part with any for the best **Money**, but in hopes thereby to procure some other commodities or necessary.”

So an old pamphleteer, in 1710, saw the same truth (*An Essay on Public Credit*, p. 25)—“ Trade found itself unsufferably straightened and perplexed for want of a general specie of a complete intrinsic worth, as the medium to supply the **Defect of Exchanging**, and to make good the balance, where a nation, or a market, or a merchant, demands of another a greater quantity of goods than either the buyer hath goods to answer, or the seller hath occasion to take back.”

So the great metaphysician, Bishop Berkeley, says in his *Querist*:

“ 21. Whether the other things being given, as climate, soil, &c., the wealth be not proportioned to industry, and this to the circulation of **Credit**, be the **Credit** circulated by what **Tokens** or **Marks** whatever.

“ 24. Whether the true idea of **Money** as such, be not altogether that of a **Ticket** or **Counter** ?

“ 25. Whether the terms crown, livre, pound sterling, are not to be considered as exponents or denominations ; and whether **Gold**, **Silver**, and **Paper**, are not **Tickets** and **Counters** for reckoning, recording, and transferring such denominations ?

“ 35. Whether **Power** to command the Industry of others [*i.e.* **Credit**] be not real wealth ? And whether **Money** be not in truth **Tickets** or **Tokens**, for recording and conveying such **Power** ? And whether it be of consequence what material the **Tickets** are composed of ?

“ 426. Whether all circulation be not alike a Circulation of **Credit**, whatsoever medium—**Metal** or **Paper**—is employed ; and whether **Gold** be any more than **Credit** for so much **Power** ?”

See also Queries, 441, 449, 450, 459, 475, and many others.

It is one of the special merits of the Economists that they clearly saw the true nature of **Money**. Among many others, Baudeau, one of the most eminent of them, said (*Introduction à la Philosophie Economique*)—“ This coined **Money** in circulation is nothing, as I have said elsewhere, but effective **Titles** on the general mass of useful and agreeable enjoyments, which cause the well-being and propagation of the human race.

“It is a kind of **Bill of Exchange**, or **Order**, payable at the will of the bearer.

“Instead of taking his share in kind of all matters of subsistence, and all raw produce annually growing, the sovereign demands it in **Money**, the effective Titles, the **Order**, the Bill of Exchange, &c.”

So Edmund Burke speaks of Gold and Silver (*Reflections on the French Revolution*) as—“The two great recognised **Species** that represent the lasting **Credit** of mankind.”

So Smith says (bk. ii. ch. 2)—“A **Guinea** may be considered as a **Bill** for a certain quantity of necessities and conveniences upon all the tradesmen in the neighbourhood.”

So Henry Thornton, the eminent banker, one of the authors of the Bullion Report, says (*An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*, p. 80)—“**Money** of every kind is an **Order** for goods. It is so considered by the labourer when he receives it, and it is almost instantly turned into money's worth. It is merely the Instrument by which the purchaseable stock of the country is distributed with convenience and advantage among the several members of the community.”

This great fundamental truth was also very clearly seen by Bastiat. He says (*Œuvres*, vol. ii. “Maudit Argent,” p. 80)—“You have a crown piece. What does it mean in your hands? It is, as it were, the witness and the proof that you have at some time done work which, instead of profiting by, you have allowed society to enjoy in the person of your client. This crown piece witnesses that you have rendered a service to society, and, moreover, states the value of it. It witnesses, besides, that you have not received back from society a real equivalent service, as was your Right. To put it into your power to exercise this Right when and where you please, society, by the hands of your client, has given you an *Acknowledgment*, or **Title**, or **Order** of the State, or Token—a crown piece, in short, which does not differ from **Titles of Credit**, except that it carries its value in itself (?); and if you can read with the eyes of the mind the inscription it bears, you can see distinctly these words—‘Pay to the bearer a service equivalent to that which he has rendered to society, value received and stated, proved and measured by that which is on me.’

“After that you cede your crown piece to me. Either it is a present, or it is in exchange for something else, if you give it to me as the price of a service. See what follows. Your account as regards the real satisfaction with society is satisfied, balanced, closed. You rendered it a service for a crown piece; you now restore it, the

crown piece, in exchange for a service: so far as regards you, the account is settled. But I am now just in the position you were in before. It is I, now, who have done a service to society in your person. It is I who am the Creditor for the value of the work which I have done for you, and which I could devote to myself. It is into my hands now that this **Title of Credit** should pass, the witness and proof of this social **Debt**. You cannot say that I am the richer; because if I have to receive something, it is because I have given something."

So again he says (*Harmonies Economiques*, "Capital," p. 209)—
 "It is enough for a man to have rendered services, and so have the Right to draw upon society, by the means of exchange, for equivalent services. That which I call the means of Exchange is Money, Bills of Exchange, Bank Notes, and also Bankers. Whoever has rendered a service, and has not received an equal satisfaction, is the bearer of a Warrant, either possessed of value like Money (?), or of Credit like Bank Notes, which gives him the Right to draw from society when he likes, and under what form he will, an equivalent service."

So again he says (*Harm. Econ. Organisation Naturelle*, p. 25),
 "I take the case of a private student. What is he doing in Paris? How does he live there? It cannot be denied that society places at his disposal food, clothing, lodging, amusements, books, means of instruction—a multitude of things, in short, of which the production would demand a long time to be explained, and still more to be effected. And in return for all these things, which have required so much labour, toil, fatigue, physical and intellectual efforts, so many transports, inventions, commercial operations, what services has the student rendered to society? None! He is only preparing to render some. Why, then, have these millions of men who have performed actual services, effectual and productive, abandoned to him their fruits?

"This is the explanation. The father of this student, who was an advocate, a physician, or a merchant, had formerly rendered services—it may be to the people of China—and had received, not direct services, but Rights to demand services, at the time, in the place, and under the form which might suit him best. It is for these distant and anterior services that society is paying to-day; and wonderful it is! If we follow in thought the infinite course of operations which must have taken place to attain this result, we shall see that everyone must have been remunerated for his pains; and that these **Rights** have passed from hand to

hand, sometimes in small portions, sometimes combined, until in the consumption of this student the whole has been balanced. Is not this a strange phenomenon?

“We should shut our eyes to the light, if we refused to acknowledge that society cannot present such complicated transactions, in which the civil and penal laws have so little part, without obeying a wonderfully ingenious mechanism. **This mechanism is the object of Political Economy.**”

So Mill says, “The pounds or shillings which a person receives weekly or yearly are not what constitutes his income; they are a sort of **Ticket or Order**, which he can present for payment at any shop he pleases, and which entitles him to receive a certain value of any commodity that he makes choice of. The farmer pays his labourers and his landlord in these **Tickets**, as the most convenient plan for himself and them.”

It is so clearly understood that Money is, in reality, nothing more than the **Right or Title** to demand something to be paid or done, that some Jurists expressly class it under the Title of Incorporeal Property.

Thus Vulteijs says:

“Nummus in quo non Materia ipsa, sed Valor attenditur.”

“**Money in which not the Material, but the Value is regarded.**”

That is, we desire or demand other things for the direct satisfaction they give us; but we only desire Money as the **Means** of purchasing other things.

Gold and Silver, therefore, may be justly termed **Metallic Credit**.

Thus it is seen that writers of all classes—Philosophers, Merchants, Bankers, Economists, and Jurists are all perfectly agreed on the nature of Money. It represents **Indebtedness**, or Services Due to the owner of it; and it represents the **Right or Title** which its owner has to demand some product or service, in recompence for some service he has done to someone else.

On Substances used as Money.

The necessity for Money has arisen among all nations, the most barbarous as well as the most civilised. As soon as the members of any community, however barbarous, begin to exchange among themselves, Unequal Exchanges must necessarily arise; and therefore **Indebtedness** is created. And some substance is hit upon to represent these services due, and the **Rights** which its holders

have to demand some product or service, in satisfaction of the services they have done to someone else.

A great many different substances have been used by different nations to represent this universal want. The Hebrews, we know, used Silver. No money was in use in the times of the Homeric poems; but some time after them, though we cannot say when, copper bars or skewers were used as Money throughout Greece, which Pheidon, of Argos, in the eighth century B.C., superseded by silver coins. The Æthiopians used carved pebbles; the Carthaginians used leather discs, with some mysterious substance sewn up in them. Throughout the islands of the Eastern Ocean, and in many parts of Africa, shells are still used. In Thibet, and some parts of China, little blocks of compressed tea are used as Money. In the last century, dried cod was used in Newfoundland, sugar was used in the West Indies, tobacco in Virginia. Smith says that, in his day, nails were used as Money in a village in Scotland. In some of the American Colonies, powder and shot; in Campeachy, logwood; and among the North American Indians, belts of wampum were used as Money. We read of another people who used cowries as small change, and the skulls of their enemies for large sums; and many other things have been used in various countries for the same purpose.

But when we consider the purposes for which Money is required, it is easily seen that no substance possesses so many advantages as a **Metal**. The use of Money being to preserve the record of services due to its possessor for any future time, it is clear that Money should not alter by time. A Money of dried cod would not keep very long, nor would it be easily divisible. Not many bankers would care to keep their accounts in dried cod, tobacco, sugar, logwood, or dead men's skulls.

One of the first requisites of Money is that it should be easily divisible into very small fragments, so that its owner should be able to get any amount of service he pleases at any time. Taking these requisites into consideration, it is evident that there is no substance which combines them so well as a metal. Metal is uniform in its texture; it can be divided into any number of fragments, each of which shall be equal in value to any other fragment of the same weight, and, if required, these fragments can always be re-united, and form a whole again, of the value of all its parts, which can be said of no other substance.

All civilised nations, therefore, have adopted Metal as Money: and of metals, Gold, Silver, and Copper have been chiefly preferred.

The Chinese invented Paper Money.

We have now to treat of a Material used as Money, which, in later times at least, has had incomparably more influence in the world than all the gold and silver—namely, **Paper**.

The Romans invented the business which, in modern language, is termed Banking. The Roman bankers invented Cheques and Bills of Exchange, but they did not invent Bank Notes. The use of Cheques and Bills of Exchange by the Romans was extremely narrow, restricted to the immediate parties, and they were never made transferable, as far as we are aware, so as to get into general circulation and serve the purposes of Money.

The invention of **Paper** to be used as circulating Money is due to the Chinese.

We believe that it has been alleged that there were Bank Notes in China more than 1000 years B.C.

We come down, however, to better authenticated times. In the beginning of the reign of Hiantsong, of the Dynasty of Thang, about the year 807 A.D., there was a great scarcity in the country. The Emperor ordered all the merchants and rich persons to bring their money into the public treasury, and in exchange for it gave them Notes, called *fey-thsian*, or flying money. In three years, however, this money was suppressed in the capital, and was current only in the provinces. In 906 A.D. Thaitsu-siu, the founder of the Soung Dynasty, revived this practice. Merchants were allowed to deposit their cash in the public treasuries, and received in return Notes called *pian-thsian*, or current Money. The convenience of this was so great that the custom quickly spread, and in 997 there was paper in circulation to the amount of 1,700,000 ounces of silver, and in 1021 it had increased to 2,830,000 ounces. At this period, a company of sixteen of the richest merchants were permitted to issue Notes payable in three years. But at the end of that time the company was bankrupt, which gave rise to much public distress and litigation. The Emperor abolished the Notes of this company, and forbade any more joint Stock Banks to be founded. Henceforth, the power of issuing Notes was kept in the hands of the Government. These Notes were also called *kiao-tsu*, and were of the value of an ounce of silver. In 1032 there were *kiao-tsu* to the value of 1,256,340 ounces in circulation. Subsequently, banks of this nature were set up in each province, and the Notes issued by one provincial bank had no currency in any

other. These were said by some to be the first Bank Notes on record, though some allege that there were earlier ones ; that is to say, Notes issued in exchange for money, or convertible into money, and not Paper Money, or paper created without any previous deposit of specie. Besides these Bank Notes, the Chinese issued Paper Money to a vast amount. (*Klaproth, Journal Asiatique*, vol. i. p. 256.)

It would be too long to give here a complete history of the Paper Money of China, but we have given some full notices of it elsewhere (*Dictionary of Political Economy, Art. Currency*, p. 666). But it may interest our readers to know the process of its manufacture.

About 1288, Marco Polo travelled in China, and discovered the existence of this Paper Money. In Book xi. c. 8, he gives an account of its manufacture. He says that it was made in Kambalu. The inner rind of the mulberry was steeped and pounded in a mortar, and then made into paper, resembling that made from cotton, but quite black. It was then cut into pieces nearly square, but of different sizes. The smallest were of the value of a *denier tournois* ; the next of a Venetian groat ; others of two, five, and ten groats ; others, one to ten gold besants. Several officers had to subscribe their names and place their seals on each Note, which was then stamped with the royal seal dipped in vermilion. Counterfeiting was a capital offence. It had then a forced currency, and no one dared to refuse it on pain of death. Caravans of merchants arrived with their goods, which they laid before the King, who selected what he pleased, and paid them in this money. When any one wished to exchange old money for new, it was done at the mint, at a charge of three per cent. If any one wanted gold or silver for manufacture, they could obtain bullion at the mint in exchange for the paper. Marco Polo mentions many cities where he saw this money in circulation.

Credit and Paper, either payable in specie, or inconvertible, now forms the great Circulating Medium, or Currency of the world, and as we shall show, amounts to nearly one hundred times the quantity of specie in this country.

The Fundamental Concept of Monetary Science.

The preceding considerations now enable us to perceive the **Fundamental Concept** of Monetary Science.

We have seen that writers of all classes have agreed as to the fundamental nature of Money. It represents **Debts** which are due to

persons who have done services to others, and have received no equivalent services in return. It merely represents the **Right** to demand these equivalent services when they please ; and its special function is to measure, record, and preserve these Rights for future use ; and to transfer them to anyone else.

If all the services exchanged in society exactly balanced, there would be no need of money.

Supposing, then, that there was nothing but Metallic Money in use, the following axiom is evident :

“The Quantity of Money in any country represents the Quantity of Debt which there would be, if there were no Money.”

But as we have seen (**Credit**) that in civilised countries, these **Debts**, or **Rights**, are recorded in the simple form of Rights against particular persons, whether written or unwritten, as well as in Metallic Coin, which are rights against the general community, the terms Circulating Medium, or Currency, include these Debts in both forms.

Hence it is clear that the Circulating Medium, or Currency, represents nothing but **Transferable Debt** ; and that whatever represents Transferable Debt is Circulating Medium, or Currency ; whatever its nature or its form may be, either Metal, or Paper, or anything else.

Consequently this proposition necessarily follows :

“Where there is no Debt there can be no Currency.”

All erroneous theories of Currency have been founded on not perceiving the fundamental nature of Currency ; and the greatest monetary disasters the world has ever seen have been produced by violating this fundamental axiom.

On the Distinction between Money and Credit.

It has now been shown that it is agreed on all hands that Money and Credit are essentially of the same nature ; Money being only the highest and most general form of Credit. They are each a Right, or Title, to demand some service or product in future.

Nevertheless, there is a very important distinction between Money and Credit, which must now be pointed out.

In Economics all Money is Credit, but all Credit is not Money.

No one can compel any one else to sell him anything for Money or Credit. When, then, any one has taken Money in exchange for anything, it is in reality only Credit ; because he only takes it in the belief that he can exchange it away for something else.

But suppose that a sale has taken place, and that a Debt has been incurred thereby, public policy requires that the Debtor should be able to compel the Creditor to accept something in discharge of his Debt. It would cause infinite misery if Creditors could arbitrarily refuse anything they pleased in payment of their Debts. Hence, in all countries the Law declares that *if a Debt has been incurred*, the Debtor can compel the Creditor to accept some specific thing in payment of it.

Whatever that **Something** is which a Debtor can compel a Creditor to accept in payment of a Debt which has been incurred, is **Money** or **Legal Tender**.

From this it follows that some things may be Money in some cases, and not in others.

Gold Coin in this country is Money, or Legal Tender, to any amount in all cases.

Silver is only Money, or Legal Tender, to the amount of 40s. If a Creditor chooses to accept of payment of a larger amount than 40s. in silver, it is entirely of his own free-will.

In England, as between the public and the Bank of England, Bank Notes are nothing but Credit. The Bank cannot compel anyone to accept its Notes, and any holder of its Notes can compel the Bank to pay them in gold on demand.

Between private persons a Bank Note for £5 is not Money, or Legal Tender, for that exact amount of Debt. But in Debts above £5, Bank Notes are Money or Legal Tender. But even this is so only so long as the Bank pays its Notes in cash on demand. If the Bank were to stop payment, its Notes would cease to be Legal Tender in any case.

In Scotland and Ireland, Bank of England Notes are not Legal Tender in any case.

If two persons are mutually indebted to each other in equal amounts at the same time, each may compel the other to accept the Debt he owes, as Legal Tender for the Debt which is due to him. Each Debt is therefore Money, or Legal Tender, in respect to the other, and neither party can demand specie from the other.

So if a Creditor voluntarily accepts payment from his Debtor in a country bank note without indorsement, he makes it Money, even though the bank should fail; or if he voluntarily accepts a Cheque from his Debtor, and has the Credit transferred to his own account, he makes it Money, and it is a final closing of the transaction, even though the bank should fail immediately after.

There is no Necessary Relation between the Quantity of

Money in any country, and the Quantity of Commodities and their Price.

We have now to demonstrate a proposition of the greatest importance in Economics, and on which errors of the most serious nature are very prevalent.

Many writers on Economics have supposed that the quantity of Money in a country bears some **necessary** relation to the quantity of commodities in it, and many more think that the prices of commodities are determined by the ratio which the quantity of Metallic Money bears to the quantity of commodities. That this is a very serious error may easily be shewn.

Suppose that A and B are mutually indebted; that A owes B £10, and B owes A £13. Then it is quite clear that their Debts may be settled in three different ways:

1. Each may send a clerk to demand payment from the other in money; this method would require £23 in money to discharge the two debts.

2. A may send £10 to B to discharge his debt, and B may send back to A the same £10, with £3 additional to discharge his debt; this method would require £13 to discharge the two debts.

3. They may meet together, and set off their mutual amounts of debt, and pay only the difference in Money; by this means the two debts would be discharged by the use only of £3.

Now it is quite clear that a very different quantity of Money would be required to carry on any amount of business in a country, according as either of these methods of settling debts was adopted. Between the first and the third there is a difference of £20. These £20 would not influence prices, but would only be required to settle debts in a clumsy way. So that it is clear that by a simple change in the method of doing business, £20 might be withdrawn from its employment, and set free to be applied to new transactions.

The adoption of the third method of settling debts in the place of the first, would in no way affect prices, because these amounts of Money would have to be retained for the sole purpose of settling Debts, and would in no way enter into the sale of commodities, and therefore in no way affect their prices. At the same time it would greatly alter the ratio between Money and commodities.

Now, when these transactions are multiplied by millions, it is evident that there may be large amounts of money in a country which may exercise no influence on prices; and the ratio between Money and commodities may vary greatly, according as one or other of these methods of doing business is adopted.

Now, if a country which habitually used the first method, were to change its custom, and adopt the third method, it is very evident that a very large quantity of Money might be disengaged from its usual employment, and applied to promote new operations; and therefore, for all practical purposes, it would be equivalent to an addition to the previously existing quantity of Money; as by this improvement in the method of settling Debts, many times the same quantity of business might be done on the same basis of specie. Hence the various methods of economising the use of Money are, for all practical purposes, to be considered as an increase of the resources of the nation.

The various methods by which this principle is applied are described under **Clearing House, Compensation, Novation.**

Reason why Paper can supersede Money.

The reason why Paper can supersede Money is now apparent.

An order to receive a coat could never serve as a substitute for a coat, because it could never serve the same purpose as a coat. An order to receive meat, or bread, or wine, could not supersede meat, bread, or wine, because it cannot serve the same purpose as meat, bread, or wine; and so on regarding orders for other material chattels. An order for such things can never serve as a substitute for the things themselves, because they are heterogeneous quantities of a totally different nature, and cannot serve the same purpose as the things themselves.

But an Order to pay Money can serve the same purpose as Money, because they are homogeneous quantities. A piece of Money, like a piece of Paper, is nothing more than an **Order** to receive a useful material chattel or a service. And, provided that the order is sure to be obeyed on demand, it is of no consequence whether it is of Metal or Paper.

Consequently, the Exchange of Paper for Money is nothing more than an Exchange of a particular Right for a general Right.

As Daniel Webster, the eminent American jurist, said: "Credit is to Money what Money is to goods." That is, Credit is an Order for Money, and Money is an Order for goods.

To be useful, Money must be exchanged away for other things, just as Paper is. And if Paper can be exchanged away for exactly the same things that money can, Paper has exactly the same Value as Money. As the Italians say—"Che oro vale, oro è"—"*That which is of the Value of Gold, is Gold.*"

NEGATIVE QUANTITIES IN ECONOMICS.

As it is now universally admitted that Economics is a Physical Science, it necessarily follows that there must be Negative Quantities in Economics as there are in all other Physical Sciences. But what are **Negative Quantities** in Economics?

We have shown that the most striking and fatal defect of the current works on Economics is that they take no notice of that colossal mass of property which consists in Abstract Rights, and is termed in law Incorporeal Property, or Incorporeal Wealth, which in recent times has increased at a very much greater rate than Corporeal, or Material, Property, and may now be estimated to amount in value to scores of thousands of millions of money.

We have shown under **Annuities** and **Property** that this class of Property, which includes Credit, the Funds, Shares in Commercial Companies, Copyrights, Patents, &c., may be justly termed **Negative Economic Quantities**, because it may all be bought and sold or exchanged; its *value may be measured in money*, just as material chattels may.

But there is another class of Quantities which have long been termed by Mathematicians and Jurists **Negative Quantities**, namely **Debts** (passive). And how are Debts (passive) Negative Quantities?

We have now to investigate the meaning of terming Debts Negative Quantities.

On the Errors made by some Mathematicians in terming Debts Negative Quantities.

The juridical theory of Credit worked out by the Roman jurists is sufficient for all practical purposes. They explained how Credits, Rights of Action, or Debts are created, how they may be transferred, and how they are extinguished. But this is not sufficient for the full scientific theory of the subject, because they treated these Credits almost entirely from the Creditor's side.

But in every Obligation there are two parties, the Creditor and the Debtor.

Now when two persons are bound together by an Obligation, such as that of Debt, it is usual to term the Creditor the **Active**, or **Positive, Agent**, and the Debtor the **Passive**, or **Negative, Agent**.

Hence, to complete the full scientific theory of Credit, it is necessary to develop it from the **Debtor's**, or **Negative**, side, as well as from the **Creditor's**, or **Positive**, side.

Accordingly for the last 150 years—from the days of Maclaurin at least—mathematicians have been in the habit of giving Debts as an example of **Negative Quantities**. But they have entirely failed in giving an explanation of the term Negative as applied to Debts, which can be received as suitable for Economic Science.

The explanation usually given is this: A man's Property may be considered as Positive, and his Debts as Negative; subtract his Debts from his Property, and the remainder, if any, is his substance, or Capital.

And as the national Capital is the aggregate Capital of all the individuals in it, according to this doctrine, in order to find the quantity of Capital in the country, all the floating debts in it would have to be subtracted from all the money in it, and the remainder would be the national Capital (in money).

Now, as we shall show hereafter, it may be conjectured that the floating debts in the country are not less than £6,000,000,000, and no one estimates the specie in the country at more than £120,000,000, it would be rather a difficult matter to perceive how £6,000,000,000 of floating debts are to be subtracted from £120,000,000 of hard money.

So Peacock and Tait, two very distinguished mathematicians, say, "If property possessed or due could be denoted by a number or symbol with a positive sign, a Debt would be indicated by a number or symbol with a Negative Sign, or conversely. Such affections of **Property** are correctly symbolised by the signs + and −, since they possess the inverse relations to each other which these signs require. For if to a person A there be given a certain property or sum of money with, or added to, a Debt of equal amount, his Wealth, or Property, remains the same as before."

Now, in a certain sense, these modes of statement have some semblance of truth. If a person were going to retire from business, he would call in and discharge his debts or liabilities, and the remainder, if any, would be his substance. But then this result could not be attained without an exchange, because his outstanding debts could not be extinguished without being brought to him to be exchanged for money.

But such a mode of statement is quite unsuitable for Economics. Economics is purely the science of Exchanges, and has only to do with Quantities while they exist; and all Exchangeable Quantities

are Economic Quantities while they exist, and are the subject of commerce. Debts, or Credits, are a species of property of the most gigantic magnitude, and are the subject of the most colossal Commerce of modern times. They exceed in magnitude every other species of property, except the land itself. And what are they to be subtracted from? The mode of statement by Peacock and Tait is entirely inapplicable to the business of banking, as I have shown in my *Theory of Credit*.

The fact is that mathematicians have completely mistaken the application of the signs + and – in Economics, from a want of knowledge of Mercantile Law and practical business.

Mathematicians are accustomed to treat of Quantities and Operations; and as these may each be of opposite or inverse natures, they apply the signs + and – to them.

The error which mathematicians fall into in applying the signs + and – in Economics is that they apply them to **Property**, whereas they affect **Persons**.

As will be shown hereafter, Persons may stand in Inverse, or Opposite, relations to each other as well as Quantities and Operations; and Persons who stand in these Inverse, or Opposite, relations may be indicated by the signs + and –, as well as Quantities and Operations.

Every student of Mercantile Law will at once perceive Peacock's error in the above extract, which is shared by other mathematicians, because Credits, or Debts, are not **Jura in re**; they are **Jura in personam**, and the Passive, or Negative, Debt is not **Money** owed by the Debtor, but the abstract **Personal Duty** to pay money.

Two Algebraists of the highest eminence, Euler and Peacock, have attempted to explain the meaning of the Negative Sign as applied to Debts, but they have both failed from a want of knowledge of the principles of Mercantile Law.

Error of Euler in terming Debts Negative Quantities.

Euler says¹:—"The manner in which we calculate a person's Property is an apt illustration of what has just been said. We denote what a man really possesses by Positive numbers, using or understanding the sign +; whereas his Debts are represented by Negative numbers, or by using the sign –. Thus it is said of any one that he has 100 crowns, but owes 50; this means that his real possessions amount to 100 – 50, that is to say, 50 crowns.

¹ *Algebra*, p. 7.

“As Negative numbers may be considered as Debts, because Positive numbers represent real possessions, we may say that Negative numbers are less than nothing. Thus, when a man has nothing in the world, and owes 50 crowns, it is certain that he has 50 crowns less than nothing; for if any one were to make him a present of 50 crowns to pay his Debts, he would still be at the point 0, though really richer than before.”

It will be seen that the statement in the first part commits exactly the error we have just pointed out.

Suppose that the person has 100 crowns, and is bound to pay 50 crowns at the end of the year, then his Property would, according to Euler, be stated as 100 crowns – 50 crowns. But it would be quite inaccurate to say that his Property was only 50 crowns, because he has the 100 crowns, which are his absolute Property, to dispose of, or trade with, exactly as he pleases in the meantime, and he is only bound to have 50 crowns at the end of the year to discharge his Debt.

Moreover, as we have shown, the Debt is the abstract Personal Duty to pay, and it does not come into existence until the time for payment has come. Consequently, the person is not in Debt at all until the end of the year; and, therefore, the Debt, which does not exist, cannot be subtracted from his Property.

But the owner of the Debt may put it into circulation, and it may be sold, transferred, or exchanged, and produce all the effects of money, any number of times, until it is paid off and extinguished. So that there may be the 100 crowns, and the Right to demand the 50 crowns, circulating simultaneously in commerce.

Moreover, as the 100 crowns are solid money, and the Debt of 50 crowns is only the Personal Duty to pay money, it is quite evident that an abstract Personal Duty cannot be subtracted from a solid sum of hard cash.

Furthermore, by the *Law of Continuity*, if we diminish the period of payment gradually and continuously to 0, and the Debt becomes payable on demand, that in no way alters the general principles of the subject. A Duty to pay, though due on demand, cannot be subtracted from a material sum of money. The Debtor's money remains absolutely intact until he voluntarily buys up the Right of Action against himself of his own free will, giving 50 crowns in exchange for it.

The expression is to be read in this way: he possesses 100 crowns, but coupled with the Duty to pay 50 crowns at some given time.

In the second paragraph, when the Debtor possesses 0 crowns, and owes 50 crowns, he is said to have 50 crowns less than nothing. This clearly means that he is under the **Duty to pay** 50 crowns, and has 0 crowns to pay them with.

Now, suppose that being in such a position, as Euler says, some one makes him a present of 50 crowns to pay his Debt with. He pays the Debt: he is 50 crowns richer than he was before; but his Property is now 0. This is an example that $+ \times + = +$.

Thus Euler is right as far as he goes; but he has stated only one-half of the case. Because there is another combination of Algebraical signs which gives $+$, namely, $- \times -$; and there is another method in commerce of arriving at the same practical result.

As any person whatever may give the Debtor 50 crowns to pay his Debt with, let us suppose that the Creditor does so. Then having received the 50 crowns in a present from his Creditor, the Debtor hands them back to his Creditor in payment of the Debt, which is then extinguished. The Debtor is now, as in the former case, richer by 50 crowns than he was before, and his property is now 0.

The same result may be attained in another way. Suppose that the Creditor simply **Releases** his Debtor from his Debt, then, as in the former case, he would be 50 crowns richer than he was before, and his Property would now be 0.

Now if Crowns be $+$, and to give is also $+$, then a Debt is $-$, and to Cancel, or take away, is also $-$. Consequently to give Money is $+ \times +$, and to Release, or Cancel, a Debt is $- \times -$, and the position of the Debtor will be exactly the same after each operation.

This shows that the **Release** of a **Debt** is, in all circumstances, equivalent to a **Payment** in **Money**.

Thus it is seen that in Commercial, as in all Algebra, $+ \times + = - \times -$, an example of the *Permanence of Equivalent Forms*, and a principle of the most momentous importance in modern commerce.

Error of Peacock in terming Debts Negative Quantities.

Peacock, Dean of Ely, who published the most philosophical treatise on Algebra in his day, and who was the first to introduce the Modern Theory of Signs into a standard treatise for popular use, endeavoured to apply the Theory of Signs to the Theory of Credit. But he has fallen into the errors so carefully provided for in the *Digest*, and by all jurists since.

He says¹—"A merchant possesses a pounds, and owes b pounds; his substance is, therefore, $a - b$, when a is greater than b .

"But since a and b may possess every relation of value, we may replace b by $a - c$, or $a + c$, according as a is greater or less than b ; in the first case we get—

$$a - b = a - (a - c) = c,$$

and in the second—

$$a - b = a - (a + c) = -c.$$

If, therefore, c expresses his substance or property when solvent, $-c$ will express the amount of his Debts when insolvent; and if from the use of $+$ and $-$, as signs of affection or quality in this case, we pass to their use as signs of operation, then inasmuch as—

$$a + (-c) = a - c, \text{ and } a - (-c) = a + c,$$

it follows that the addition of a Debt ($-c$) is equivalent to the subtraction of property, c , of an equivalent amount; and the subtraction of a Debt ($-c$) is equivalent to the *addition* of Property, c , of an equal amount; and consequently it appears that the subtraction of a Debt, in the language of symbolical Algebra, is not its **Obliteration** or **Removal**, but the change of its affection, or character, from Money, or Property, **Owed**, to Money, or Property, **Possessed**."

Peacock, as is seen, arrives at the conclusion that the subtraction of a Debt is equivalent to the addition of Property. The conclusion is right, as we have seen above; but his method of arriving at it is entirely erroneous, as has been repeatedly pointed out by Jurists. The Negative Sign $-$ is not a sign affecting the **Money**, or the **Property**, of the Debtor, but it is a sign affecting his **Person**.

If such a distinguished mathematician as Peacock was had only reflected, he could not have failed to perceive that his interpretation of the Negative Sign, as applied to Debts, could not be correct, because the signs $+$ and $-$ always refer to *Similar* Quantities, but of opposite Qualities. Now the sign $+$ represents the Creditor's Personal Right to demand a sum of Money, and a material sum of Money can, by no possibility, be the Inverse of an Abstract Personal Right. It must be something which is the Inverse of a Right, and the Inverse of a **Right** is a **Duty**.

The modes of statement adopted by Euler and Peacock are open to the following objections:—

1. They violate the fundamental principles of the Philosophy of Science.

¹ *Algebra*, second edition, vol. ii. p. 15.

Because Economics, being the Science of Commerce, or Exchanges, all questions and problems in Economics must be stated in the form of an Exchange. Economics has nothing to do with addition and subtraction.

2. They violate the principles of Jurisprudence.

Because a Creditor has no Right, or Title, to any of the **Property** of his Debtor, he has only a Right, or Claim, against his **Person**.

Peacock's mode of statement confounds the distinction between a Trustee and a Debtor. A person who merely holds a sum of money to which another person has a Right, is a **Trustee**, or **Bailee**, and not a **Debtor**. The property of a Debtor belongs absolutely to himself, and he only parts with it by his own voluntary consent.

There is no such thing in Law as Money, or Property, owed. There is only the Abstract Personal Duty to pay or do something.

3. They violate the elementary principles of Mathematics.

Because an abstract Personal Duty cannot be subtracted from a sum of hard cash.

A sum of solid Money cannot be the Inverse, or Negative, of an abstract Personal Right.

In Economics the signs $+$ and $-$ do not affect **Property**, but only **Persons**.

In Economics the signs $+$ and $-$, as signs of Operation, in no case whatever signify addition and subtraction, because addition and subtraction are no part of Economics. What they do mean will be shown a little further on.

The result which Peacock has arrived at is correct, but his course of reasoning is entirely erroneous. The result is not produced in the way in which he says it is, but just exactly in the way in which he says it is not. We shall presently show how the result is arrived at, by a totally different course of reasoning.

Error of Thornton and Cernuschi on Credit.

We have shown the error of two very distinguished Algebraists, in their interpretation of the Negative Sign, as applied to Debts. We have now to point out the error of a plausible view, held by two distinguished bankers.

It has been asserted that Credit adds nothing to the resources of the world, because it is neutralised by something else.

Any person practically conversant with commerce, and seeing

that the enormously greater portion of commercial operations are carried on by Credit, would think it a strange doctrine that Credit adds nothing to the resources of a nation, or of an individual. It is now universally agreed that the only true definition of Wealth is "Anything which has Purchasing Power." The Wealth of an individual or a nation is their "Purchasing Power"; and their Purchasing Power is their Money, *together with their Credit*. Credit is, therefore, Purchasing Power over and above, and additional to Money; and hence it must be a resource cumulative to Money.

Some writers, however, have maintained the contrary doctrine in a very plausible way, which we have now to examine.

Henry Thornton, an able man, a distinguished banker, and one of the authors of the Bullion Report, says:¹ "Paper constitutes, it is true, an article on the Credit side of the books of some men, but it forms an exactly equal item on the Debit side of the books of others. It constitutes, on the whole, neither a Debit nor a Credit. . . . The use of Paper does not, therefore, introduce any principle of delusion into that estimate of property which is made by individuals."

So another eminent banker, M. Cernuschi, says:² "The balance-sheet of every individual contains three accounts, existing goods, Credits, and Debts. But if we collected into one all the balance-sheets of everyone in the world, the Debts and Credits mutually neutralise each other, and there remains but a single account—existing goods.

"The totality of goods, therefore, forms the general inventory. There is the first matter of exchange. The Debts and Credits are subsidiary matters. Debts and Credits are reciprocally transmitted as goods are transmitted; but however great, or however small, they may be, and through whatever hands they may pass—Credits for some, Debts for others—they add nothing to, and take nothing away from the general inventory."

The argument of Thornton and Cernuschi is simply this: Suppose A to have £100 in Money, and also a three months' bill of £50 on B; suppose B to have £100 in Money, and at the same time to have accepted a Bill for £50 at three months to A. Then A's property would be stated thus, £100 + £50; B's property would be stated thus, £100 - £50.

¹ *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*, p. 20.

² *Mecanique de l' Echange*, p. 1.

Now the argument of these writers is this: The + £50 and the - £50 balance and neutralise each other, and the result is 0; which, according to them, is the same thing as saying that these Quantities do not exist at all.

This view might, perhaps, at first sight, seem somewhat specious; but a very little reflection will show that it is quite erroneous.

It alleges that if there are two equal and opposite quantities in existence at any moment, which may neutralise each other's effects, and the result is 0, that that is the same thing as saying that these two quantities do not exist at all.

Suppose that two equal and opposite forces act upon a particle at rest—they neutralise each other's effects, and the result is 0; but it would be highly erroneous to say that for that reason they do not exist at all.

Suppose that on a division the Government has 345 supporters, and 300 opponents. The 300 members on each side neutralise each others' effects, and the result is that the practical force of the Government is 45; but that does not imply that the 600 members do not exist at all.

Hence, even if it were true that these equal and opposite quantities, Credits and Debts, neutralised each others' effects, it would be quite erroneous to say that that is the same thing as saying that they do not exist at all.

The error consists, as we have pointed out, in supposing that, in the case of Obligations not yet due, the Debt is an existing negative quantity neutralising the effect of the Credit.

The Credit, or the Right of Action of the Creditor, is an existent Quantity, which may be bought and sold like Money, or any other chattel. The Debt, or Duty to pay, does not come into existence until the Credit has expired, and the day of payment has come, and consequently it cannot neutralise the Credit.

And even supposing that it is payable on demand like a Bank Credit, it is still an Economic Quantity until payment is demanded and it is extinguished, and the Debtor's property remains entire until he voluntarily gives some of it up to buy up the Right of action against himself. These considerations are of supreme importance, as we shall see, in understanding the nature of Banking.

Personal Credit is a person's Purchasing Power *over and above* his Money. Hence Credit is a Resource and Wealth cumulative to Money, and the whole mass of Circulating Credits are Economical

Quantities over and above and additional to Money, and they are in their nature and effects in every respect equivalent to an equal quantity of Money.

On the Application of the Theory of Algebraical Signs to Economics.

The perplexities of the Theory of Credit, which have baffled all the Economists in the world to explain, can only be unravelled by the great modern doctrine of the separation of the signs of Affection, or Distinction, and Operation.

As the introduction of this great doctrine into Economics is perfectly novel, we shall have to treat of it rather fully, especially as there may be students of Economics who are not very familiar with it in other sciences. And we shall endeavour to make it intelligible to those who have not become acquainted with it.

It is a striking example of the universal truth that Practice has always preceded Theory, that even the Practice of Science long preceded the Theory of Science.

Sixteen hundred years ago Diophantus said :—

“ λείψις ἐπὶ λείψιν πολλαπλασιασθεῖσα ποιεῖ ὑπαρξιν.”

“ *Defect multiplied into defect gives existence.*”

And it is said in the *Basilica* :—

“ δύο ἀρνήσεις μίαν ποιοῦσιν κατάθεσιν.”

“ *Two Negatives make an Affirmative.*”

This is simply the Algebraical doctrine that $- \times - = +$, and from the days of Diophantus this has been perfectly well understood as an empirical rule in Algebra.

When the great pioneers of Algebra in modern times—Harriot, Fermat, Vieta, Des Cartes, Cardan, Tartaglia, and others—translated their reasonings into general symbols, they found that they had created a machine whose working they were not fully able to apprehend.

They found, among other things, that many problems produced **Negative** answers. Unable at first to apprehend the meaning of Negative answers, they believed that they had no real interpretation, and they called Positive roots true (*veræ radices*), and Negative roots false (*fictæ radices*).

In the progress of Natural Philosophy, the Negative sign was used to a vast variety of quantities, but no general Theory of signs was devised, and the progress of mathematics was much impeded by the want of this generalisation

The rule that $- \times - = +$ was universally adopted in practice, as a mere matter of empiricism, because it alone produced right results. But Algebraists were wholly unable to explain it. It was wholly unknown to Newton, and when he tried to explain it, the great Euler babbled like a child.

Even so late as 1813, Frend, a distinguished mathematician at Cambridge, denied the existence of, and ridiculed the idea of there being, any such thing as "Negative" Quantities.

Many centuries ago, at least about 1100 A.D., the Hindoo Algebraists had made considerable progress in explaining the Theory of Signs; but nothing was done in Europe till near the end of the last century. Since then a new spirit of philosophy has been breathed into the old science, and a number of eminent Algebraists—Arbogast, Argand, Buée, Armand, Carnot, Warren, De Morgan, Peacock, and others, have completely established the Theory of Signs; and their labours have resulted in what is called the Separation of the Signs of Affection, or Distinction, and Operation. This great Theory was first published in a standard treatise for popular use by Peacock, in his Algebra about 1834, from which we learnt the science.

In most of the common books on Algebra the student is told that the sign $+$ means addition, and the sign $-$ means subtraction.

He is then told that $+ \times +$ gives $+$, and $- \times -$ also gives $+$, a doctrine which, without further explanation, is an inscrutable mystery, not to say an absurdity, as appears in Frend's sarcastic comments on it.

Writers who are not versed in Natural Philosophy have no conception of the signs $+$ and $-$ meaning anything but addition and subtraction. It is perfectly true that in some cases these signs do have that meaning, but that is only one of their meanings. Every one who has any knowledge of Mathematics and Natural Philosophy knows perfectly well that in reality these signs have an immense variety of meanings, according to the particular circumstances out of which they arise, or the body of facts to which they relate, and that it is wholly impossible to determine their meaning until we know the particular circumstances under which they arise.

We must now explain the general use of these signs in Mathematics and Natural Philosophy, and show how they are to be interpreted in the particular body of facts which constitute the science of Economics.

All Sciences deal with Quantities and Operations.

In order to explain the matter in the simplest way possible, it may be said that all Sciences deal with **Quantities and Operations**.

Now throughout all Nature there is **Inverseness, Opposition, or Contrariety**—Inverseness, Opposition, or Contrariety of **Quality**, and Inverseness, Opposition, or Contrariety of **Operation**.

Thus, Similar Quantities may be endowed with **Inverse, Opposite, or Contrary Qualities**, and when they are so it is invariably the custom in Mathematics and Natural Philosophy to distinguish them by the signs $+$ and $-$.

These signs so used in Mathematics and Natural Philosophy denote the **Inverse, Opposite, or Contrary Qualities** of Quantities of a similar nature, no matter what the Inverseness, Opposition, or Contrariety may consist in; it may be of any sort, or description; they are then usually termed in Mathematical works **Signs of Affection**, or we may with equal propriety term them **Signs of Distinction**, or of **Quality**.

But also **Inverse, Opposite, or Contrary Operations** may be performed on these Quantities so affected by **Inverse, Opposite, or Contrary Qualities**; and these **Inverse, Opposite, or Contrary Operations** are also denoted by the same signs $+$ and $-$. And any Operations of an **Inverse, Opposite, or Contrary** nature are denoted by these signs, no matter what the Inverseness, Opposition, or Contrariety may consist in, it may be of any sort or description whatever. They are then termed **Signs of Operation**.

Now in every new body of facts which is brought under scientific control, and in every new Science whatever, **Inverseness, Opposition, or Contrariety** is sure to appear; **Inverseness, Opposition, or Contrariety of Quality**: and **Inverseness, Opposition, or Contrariety of Operation**. And consequently, the signs $+$ and $-$ receive new applications of meaning in every new Science which comes into existence. And it is quite impossible to determine the meaning of these Signs until we know the **Nature** of the **Quantities** which they refer to, and the **Nature** of the **Operations** they denote.

As each of the Physical Sciences has been brought under the control of Mathematics, these signs have received new meanings, according to the Quantities and Operations they refer to. Consequently they have already received a vast variety of meanings, and they will continue to receive new meanings according as every new

body of facts, and every new Science, is brought under Mathematical control.

We have now to determine what is their meaning and application in the body of facts which is denominated the Science of Economics, when it is brought under Mathematical control.

It is the combination of these Signs denoting Quantities affected by Inverse, Opposite, or Contrary **Qualities**, with the same Signs denoting Inverse, Opposite, or Contrary **Operations** performed upon them; that is, the combination of the Signs of Affection, or Distinction, with the Signs of Operation, which gives rise to the well-known Algebraical Rules :—

+	×	+	gives	+
+	×	−	„	−
−	×	+	„	−
−	×	−	„	+

These laws, from the necessary principles of Natural Philosophy, are true in all Sciences, and in all cases whatever. They are universally true in all departments of Mathematics and Natural Philosophy, and therefore they must necessarily be equally true in Economics when brought under the dominion of Mathematics.

They are alone capable, by giving a due adaptation of their general meaning to the particular facts of Economics, of completely solving the theory of Credit, which has hitherto been the opprobrium of the Science.

There are in Economics, like as in every other Physical Science whatever, Quantities possessing Inverse, Opposite, or Contrary Qualities, or Properties, and therefore, following the strictest analogy of Mathematics and Natural Philosophy, we shall distinguish them by Opposite Signs.

And also Opposite Operations may be performed upon these Quantities affected by Opposite Qualities, bringing into play the well-known Algebraical Rules, which will lead to consequences which may surprise some readers, and enable us to erect Economics into a great Physical Science.

Examples of the Algebraical Signs applied to Quantities.

We will now give some examples of the signs + and − applied to Quantities of a similar nature, but of Opposite Qualities, to furnish us with analogies to guide us to their application in Economics.

If we take the meridian of Greenwich as 0, degrees of longitude

East and West of Greenwich are opposite to each other; if then the ones are denoted by $+$, the others will be denoted by $-$.

So, in Algebraical Geometry, in which it is necessary to fix the position of the lines, if any fixed point be taken as o , lines drawn in opposite direction from it, either to the right or to the left, or upward or downward from it, are distinguished by the opposite signs $+$ and $-$.

So, if a line revolving in one direction be denoted by $+$, then when it revolves in the opposite direction it is denoted by $-$.

So, if an angle above, or to the right of, a line be denoted by $+$, an angle below, or to the left of, the line will be denoted by $-$.

If two mechanical forces act in opposite directions, they are distinguished by the opposite signs $+$ and $-$.

If 1 be multiplied by powers of a , the results are termed Positive powers of a ; if 1 be divided by powers of a , the results are termed Negative powers of a .

In modern Kinematics, an accelerating force is one which causes a body to change its rate of velocity; if it *increases* the rate of velocity, it is termed a **Positive** accelerating force; if it *diminishes* the rate of velocity, it is termed a **Negative** accelerating force.

In errors of observing phenomena, if the error is *greater* than the truth, it is termed **Positive**; if it is less than the truth, it is termed **Negative**.

In mercantile papers it is usual to compare the weekly result of railway traffic with the results of the corresponding week in the preceding year. If the result of the present year exceeds last year, the *difference* is denoted by $+$; if it falls short, the *difference* is denoted by $-$.

Mr. Ball says¹ that there is good reason to believe that the signs $+$ and $-$, which have exerted so potent an influence in mathematics, originated in the German warehouses, where it was the custom to mark packages which exceeded a certain weight with a $+$, and packages which fell short of the proper weight with a $-$.

A curious instance of this may be cited from steam navigation. Owing to the resistance of the water, the paddles or the screw of a steamer do not in general propel the vessel through the water so fast as they would do if there was no resistance. This *Loss* of speed is termed the *Slip*. But in the case of the screw, by giving the stem

¹ *A Short History of Mathematics*, p. 185.

of the vessel a peculiar shape, the paradoxical result may be obtained that it may be made to go through the water *faster* than it would do if the screw were working in a solid. In this case the difference between the theoretical and the actual speed is a **Gain** instead of a **Loss**, and this Gain is called the **Negative Slip**.

And the instances which might be cited from the various mathematical and physical sciences are innumerable.

Now the idea of Opposition is applied to a continuous line, and to Motion in a continuous line. If any point be taken as 0, then the part of the line on one side of 0 may be denoted by +, and the part on the other side by -.

Thus, in a thermometer, some fixed point, as the freezing point, is taken as 0, and degrees above that are termed degrees of **Heat**, and are denoted by +; degrees below 0 are termed degrees of **Frost**, and are denoted by -.

Now suppose that the mercury rises from 10° of Frost to 15° of Heat; to find the total rise of the mercury, the degrees on both sides of 0 must be added together. That is, the Negative degrees must be added to the Positive degrees, and not subtracted from them.

In Natural Philosophy, **Time** is considered as **Motion** in a continuous line. If, therefore, any point in Time be fixed on, and denoted by 0, then time on Opposite sides of this point will be denoted by Opposite signs. If Time before this epoch be denoted by +, then Time after this epoch will be denoted by -, and the successive intervals of time, whether years, months, weeks, days, or hours, will be denoted thus:—

. . . + 6, + 5, + 4, + 3, + 2, + 1, 0, - 1, - 2, - 3, - 4, - 5, - , 6 . . .

In short, in the most general terms possible, take any Quantity, whatever it may be, and then take its **Inverse**, **Opposite**, or **Contrary**, and if the one of these be denoted by +, the other will be denoted by -.

Thus Up and Down, Right and Left, Before and Behind, Before and After, Time Past and Time Future, Above and Below, Face to Face, Back to Back, Erect and Inverse, Concave and Convex, Sympathy and Antipathy, Virtues and Vices, Rewards and Punishments, Right and Wrong, **Rights** and **Duties**, **Active** and **Passive**, and innumerable other things, are all Inverse, Opposite, or Contrary to each other, and may all be distinguished by the opposite signs + and -.

The Signs + and – may also be applied to Persons who stand in Opposite Relations to each other.

Mathematicians are only accustomed to deal with Quantities, mathematical and physical, which are endowed with Inverse, Opposite, or Contrary Qualities, and they universally apply the signs + and – to them.

But **Persons** may also stand in Inverse, Opposite, or Contrary Relations to each other, and the signs + and – may be equally applied to Persons who stand in Inverse, Opposite, or Contrary Relations to each other, as to Quantities which are affected by Inverse, Opposite, or Contrary Qualities.

Thus **Creditor** and **Debtor**, **Master** and **Servant**, **Supporters** and **Opponents**, **Tutor** and **Pupil**, **Examiner** and **Examinee**, **Flogger** and **Floggee**, and in innumerable other cases, **Persons** stand in Inverse, Opposite, or Contrary Relations to each other.

In all these cases the one party is termed the **Active** or **Positive** Agent, and the other party the **Passive** or **Negative** Agent.

And in the *Nexus*, Contract, or Obligation between such Persons, Jurists term the Right of the Active, or Positive, Agent, the **Active**, or **Positive**, Right or Duty; and the Duty of the Passive or Negative Agent, the **Passive**, or **Negative**, Right or Duty.

Example of the Application of the Positive and Negative Signs to Time.

We shall now give an example of the Application of the Signs + and – to **Time**, which is of supreme importance in elucidating the Theory of Credit.

Suppose this question were asked—

*A Father's age is 40, and his Son's 15: when **Was** the Father twice the age of his Son?*

Let x be the number of years *before* the present time when the father **was** twice the age of his son.

$$\text{Then } 40 - x = 2(15 - x),$$

$$\text{Or } x = -10.$$

What does this Negative answer mean?

It means that the father never *was* twice the age of his son in Time *past*, which is taken as *Positive* in the question; it means that the epoch or the event of the father being twice the age of his son is to be found in Time *opposite* to the *past*; that is to say, in Time

future. The father *was* not twice the age of his son ten years *ago*; but he *will be* twice as old as his son ten years *hence*, as is very clear, because ten years *hence* the father *will be* 50, and the son 25.

Hence, if any event which has happened in Time *past* is **Positive**, the same event, if it is to happen in Time *future*, is **Negative**.

Thus, if a Product, or Profit, which *has been* realised in Time *past* is distinguished as **Positive**, then a Product or Profit which *is to be* produced in Time *future* is **Negative**.

Hence, if any Economic Quantity, or Capital, of any form produces Profits in a continuous series, the Profits which *have been* produced in Time *past* or Positive time, may be distinguished as **Positive**, and the Profits which *are to be* produced in Time *future* or Negative time, may be distinguished as **Negative**.

And, consequently, the **Right** to the Profits already realised in time *past* may be distinguished by the sign +, and termed **Positive**, and the **Right** to the Profits which *are to be* produced in Time *future* may be distinguished by the sign -, and termed **Negative**.

And the total Value of the Economic Quantity, or the Capital, comprehends both the **Right** to the profits already realised in the past, and also the **Right** to the profits to be produced in the future, or both the **Positive Right** and the **Negative Right**.

These doctrines apply to all Economic Quantities, or Capital, producing a continuous series of profits; *i.e.* all Economic Quantities of the form of an Annuity, such as the Land, Personal Credit, Shares in Commercial Companies, the Funds, Copyrights, Patents, the Goodwill of a business, Tolls, Ferries, &c.

Examples of the Algebraical Signs applied to Operations.

The same signs + and - are also applied to any Operations whatever of an Inverse, Opposite, or Contrary nature, no matter what the Inverseness, Opposition, or Contrariety may consist in.

Thus, to Add and to Subtract, to Pay and to Receive, to Do and to Undo, to Build up and to Pull down, to Admit and to Deny, to Grant and to Refuse, to Expand and to Contract, and innumerable other verbs denoting Opposite, or Contrary, Operations, which every reader can supply for himself, are all distinguished by the opposite signs + and -.

And as in the most general way possible, any Operations whatever which can be conceived of an Inverse, Opposite, or Contrary, nature, are distinguished by the signs + and -, to **Create**, or to call into existence out of the **Absolute Nothing**, and to **Cancel**, **Annihilate**,

or **Decreate** into the Absolute Nothing, are Operations of an Inverse, Opposite, or Contrary, nature.

Hence if to **Create**, or call into existence out of the Absolute Nothing, be denoted by the Positive sign +, to **Cancel**, **Annihilate**, or **Decreate** into the Absolute Nothing, will be denoted by the Negative sign -.

Now in the purchase of Money, or Goods, on Credit, a *Nexus*, Contract, or Obligation is **Created** out of the Absolute Nothing, and on the Payment of the Debt the Contract, or Obligation, is Cancelled, Annihilated, or **Decreated** into the Absolute Nothing.

Now we have shown above that a Contract, or Obligation may be denoted by this symbol—

$$\left\{ \begin{array}{l} + \text{£}100 \\ - \text{£}100 \end{array} \right\}$$

Hence, to **Create** an Obligation may be denoted by this symbol—

$$+ \left\{ \begin{array}{l} + \text{£}100 \\ - \text{£}100 \end{array} \right\}$$

And to **Cancel**, **Annihilate**, or **Decreate**, an Obligation may be denoted by this symbol—

$$- \left\{ \begin{array}{l} + \text{£}100 \\ - \text{£}100 \end{array} \right\}$$

Now when an Obligation is Created, the Creditor's Right of Action is **Created** out of the Absolute Nothing.

But as has been shown, in every system of jurisprudence in the world, a Right of Action is *Pecunia*, *Res*, *Bonum*, *Merx*, *χρήμα*, *πράγμα*, *οὐσία*, *οἶκος*, &c. ; Goods, Chattels, Merchandise, a Vendible Commodity, it may be bought and sold ; its value can be measured in money, because it will be paid at maturity, and, therefore, it is **Wealth**.

Hence it is manifest that Goods, Chattels, Merchandise, **Wealth**, has been **Created** out of the Absolute Nothing.

And when the Obligation is paid, satisfied, discharged, and extinguished, this Right of action ceases to exist ; it is **Cancelled**, **Annihilated**, and **Decreated** into the Absolute Nothing from whence it came.

Hence Goods, Chattels, Commodities, **Wealth** can be Created out of the Absolute Nothing, and **Decreated** again into the Absolute Nothing from whence they came, to the utter confusion of all the materialistic philosophers from Kapila to the present day, and the first School of Economists.

The superlative importance of these considerations will appear when we come to exhibit the mechanism and practical effects of the great system of banking.

Jurists also use the terms Positive and Negative to denote Opposition.

Jurists also, as well as mathematicians, very commonly use the terms Positive and Negative to denote opposition.

Thus Ortolan uses the term Positive Rights to denote Rights to Acts, and Negative Rights to denote Rights to Forbearances.

Jurists class servitudes as Positive and Negative, or those which consist in the Right to use the given subject in a given way, and those which consist in the Duty of the owner of a given subject to be used in a given way.

Ortolan calls the Omission or Refusal on the part of a person to act or do something a Negative fact.

If a certain thing happens it is a Positive fact; if it does not happen it is a Negative fact.

So Austin speaks of Positive and Negative wrongs, or wrongs of *Com*-mission and *O*-mission.

In Parliamentary language a Bill which is thrown out is said to pass in the Negative.

In its relation to a Right, a Duty is Negative; but Duties themselves are Positive and Negative; there is the Duty to *do* something, and the Duty to *abstain* from doing something. Thus we have, as it were, a Negative sign within a Negative sign, which we shall hereafter find to be the case in Economics.

So Active and Passive are distinguished as Positive and Negative. Jurists term Rights Active or Positive Rights, and Duties Passive or Negative Rights.

Thus, if the Right to demand £100 be denoted by (+ £100), the Duty to pay £100 will be denoted by (− £100), without any reference to any specific £100 in cash.

But not only Mathematicians and Jurists, but also purely literary writers, constantly adopt the same usage.

Thus Bishop Stubbs says of Edward II.: "His faults are quite as much Negative as Positive; his character is not so much vicious as devoid of virtue."

When a man is said to be Negatively virtuous, it means that he possesses no active virtues, but is free from vices.

And any reader of attention will observe that such usage is of constant occurrence.

On the true Meaning of saying that Debts are Negative Quantities.

It has been shown that mathematicians apply the term “**Negative**” to Debts, but have erred in the interpretation of the sign $-$, because they apply it to the **Property** of the Debtor.

But Jurists also term Debts “**Negative**” Quantities; but they interpret the sign $-$ in quite a different way to what mathematicians do, for they apply it to the **Person** of the Debtor, and then the meaning of the term becomes perfectly clear.

A Contract, or Obligation, consists of two parts :—

1. The Creditor’s **Right to Demand**.
2. The Debtor’s **Duty to Pay**.

The two Quantities are Inverse, Opposite, or Contrary to each other; the first is Active or **Positive**, and the second is Passive or **Negative**.

Hence the Creditor’s Personal Right of Action is the Positive Quantity, and the Debtor’s Personal Duty to Pay is the Negative Quantity.

Hence, if a person has £500 at his banker’s, and is also bound to pay £50 at some given future time, or even on demand, and therefore his Property may be stated as £500 – £50, it is not to be read as if he had only £450 at his banker’s, but it is to be read in this way: He possesses £500 in absolute property, but coupled with the Duty to Pay £50 at a given time, or when demanded, and his property can only be reduced to £450 by giving up to him the Right of Action for £50.

Hence in Economics the symbol $(+£100)$ always denotes the Right to Money, or the Right to demand Money, such as Bank-notes, Cheques, Bills of Exchange, or other securities, and the symbol $(-£100)$ always denotes the Personal Duty to pay Money.

We now clearly see the meaning of saying that Money is a Positive Quantity, and Debt a Negative Quantity, because Money denotes a Right, and Debt denotes a Duty.

And this exactly corresponds with the usual, but not universal, Algebraical doctrine, that Quantities, passing through 0, change their sign. Because when a person has spent all his money, and, therefore, his property is 0, and then incurs a Debt, he has exhausted all his Right to demand, and has incurred a Duty to pay.

So when a man’s property is said to be £100 less than nothing,

it means that he is under the Duty to pay £100, and has no money to pay them with.

It is now seen how necessary it is to observe the double meaning of the word Debt, both in Law and common usage.

When a Debt is termed "Goods," "Chattels," "Merchandise," "Wealth," it means the Creditor's **Right of Action**.

When a Debt is termed a "Negative" Quantity, it means the Debtor's **Duty to Pay**.

And as the Inverse, Opposite, or Contrary Quantities in an Obligation are created together, can only exist together, and vanish together, they are exactly analogous to Polar Forces.

If Money be termed Positive Capital, Credit may be termed Negative Capital.

A merchant's Wealth, or Purchasing Power, consists of his Money, his Rights to demand Money, *i.e.*, the Bank Notes, Cheques, Bills of Exchange, or other Securities he may possess, and his Credit, *i.e.*, his Right to the future products of his industry.

If he buys goods with his Money and sells them with a Profit, he first replaces the sum he has expended, and the surplus is his Profit.

If he buys goods with his Credit, he creates a Debt against himself; when he sells the goods, he first discharges the Debt he has incurred, and the surplus is his Profit.

In either case, his Profit consists in the excess of his Property at the end of the operation above what it was at the beginning.

Now, as Senior says, "Economists are agreed that *whatever* gives a Profit is properly termed Capital."

If he buys with Money, he makes Capital of the realised Profits of the **Past**; if he buys with **Credit**, he makes Capital of the *expected* Profits of the **Future**.

In each case he makes a Profit; hence by the Definition, **Money** and **Credit** are equally **Capital**; but they are Inverse, or Opposite to each other; hence, if **Money** be termed **Positive Capital**, **Credit** may be termed **Negative Capital**.

By a somewhat curious coincidence of thought, the early Algebraists, not apprehending the meaning of the Negative Roots of Equations, called them *fictitious* roots (*fictæ radices*), while they called the Positive Roots true roots (*veræ radices*).

Thus, in the problem we gave of the father's and son's ages, the answer came out negative, which merely meant that the question

should have been stated in the Opposite, or Inverse, way to what it was done ; it should have been asked when the father's age *would be* twice that of his son, instead of when it *had been*. And, therefore, as the Positive sign in that equation meant *past* time, the Negative sign meant *future* time. But this root, though Negative, is as real a root as the Positive one.

The root of an equation is any quantity whatever which satisfies the terms of the equation ; hence a Negative quantity which satisfies the terms of an equation is as much a **Real root** as a Positive quantity.

So in a similar way, many writers, seeing clearly the effects of Credit, call Money *Real* Capital, and Credit *Fictitious* Capital.

But the truth is that, like as the Negative root of the equation is equally a Real root as the Positive one, Credit which is certain of being paid is of exactly the same Value as Gold itself, as Mill has expressly acknowledged.

Money is the Property in gold already acquired, and Credit is the Property in gold which is to be acquired. Therefore, Credit is Inverse, or Opposite, to Money, but Credit is in every way as Real a Value as gold ; by using Money the trader makes Capital of the realised profits of the past ; by using his Credit he makes Capital of the expected profits of the future ; but Money and Credit are equally saleable and valuable commodities.

The fact is that when we adopt **Exchangeability** as the sole essence and principle of wealth, the whole difficulty vanishes, for Money and Credit are equally Exchangeable Quantities.

NEGOTIABLE INSTRUMENTS.

There are two classes of paper documents which circulate in commerce, and are transferable by indorsement, which are yet of two distinct natures :

1. Those which arise out of a **Bailment**.
2. Those which arise out of a **Debt**.

When a person buys Goods or Money from another on Credit, the property in the goods or money passes absolutely to the buyer, and he gives as the price in exchange for them to the seller a Right of Action to demand the price of the goods at a future time, or an equal amount of money. All transactions on Credit are sales or exchanges. This Right of Action is also called a Credit or a Debt. This Right of Action, Credit, or Debt may be written down on

paper, and made transferable to bearer, or to order; and then it may circulate in commerce, just like money. This paper document is not the title to any specific sum of money from the person of the debtor at the fixed time. It is called a **Credit** because, if any chooses to purchase it, he only does so because he believes that the debtor can pay it at the due time. The law of the transfer of this paper document follows the law of money. That is, if it is stolen from the true owner, or a person finds it, the true owner can recover it from the possession of the thief or finder. But if the thief or finder passes it away in commerce for value, and a person purchases it innocently, not knowing that it is not the real property of the seller, and gives full value for it, he acquires the absolute property in it, and has the right to sue all the parties to it. That is, the property in it passes by Delivery. The rightful owner has lost the power of recovering it from an innocent holder for value. That is he has lost his *jus vindicandi*.

It is this quality of the property in the document passing by delivery and honest possession, which is termed **negotiability**. All documents made payable to bearer, or to order, entitling the holder to demand money from a person, possess this quality of Negotiability, with a few exceptions. This quality of Negotiability is called also **Currency**.

A simple abstract Right of Action not written down on any material is an Incorporeal Chattel, but when it is written down on any material such as paper, it becomes a material commodity just like money.

As these documents are not titles to any specific money, and are only abstract Rights of Action against a person, they do not form one property with the money they may ultimately be paid in, but they are themselves independent. Exchangeable, or Economic, quantities, whose value depends on exactly the same principle as the value of anything else, namely, whether they can be exchanged for money at the proper time.

In every system of jurisprudence they are classed as Wealth, Goods, Chattels, vendible Commodities, Merchandise, Incorporeal Chattels, Incorporeal Wealth.

They circulate in commerce exactly like money, and produce exactly the same effects as money on prices and production.

These abstract Rights of Action are termed *Jura in personam*. They comprehend Bank Notes, Cheques, Bills of Exchange, Promissory Notes, Dividend Warrants, &c., and Postage Stamps.

They are termed in Law **Valuable Securities**.

NOVATION.

μετάθεσις, ἑξτάξις: *Renewal, or Transfer.*

An Obligation, or Credit, or a Debt, may be discharged and extinguished by substituting a new Obligation, Credit, or Debt for it. The new Obligation pays, discharges, and extinguishes the preceding one, and the extinguishment of the preceding Obligation is the consideration for the new one.

This is termed **Novatio** in Roman Law; *μετάθεσις* in Greek Law; and Renewal, or Transfer, by us.

This Novation may take place in two ways:

1. The Debtor may give his Creditor a new obligation of his own in payment of the former one, which the Creditor accepts in lieu and substitution of the preceding one. The new Obligation is the price, or payment, of the former one: and the extinguishment of the previous obligation is the consideration for the new one.

As, for example, when a banker agrees to renew a Promissory Note for his customer, the new note pays and extinguishes the prior one, the extinction of the preceding Debt is the consideration for the new note, and no Debt, or Duty to Pay, arises until the new note becomes due.

Or when a Creditor has a Debt due to him payable on demand, and he agrees to take a Promissory Note at three months from his Debtor. The note pays, discharges, and extinguishes the Debt payable on demand; the extinction of the Debt payable on demand is the consideration for the Note; and no debt, or Duty to Pay, arises until the Note becomes due.

This form of Novation is termed Renewal by us.

2. The Debtor may, in payment of his own Debt, transfer to his Creditor a Debt due to him from some one else. If the Creditor agrees to receive this Debt due to his Debtor in payment of the Debt due to himself, this Debt due from the Debtor's Debtor pays and extinguishes the Debt due from the Debtor himself.

But the Creditor may retain his own Debtor as surety, in case of the new Debtor's failure to pay.

A familiar instance of this is where a Debtor pays his Creditor in Bank Notes. In payment of his own Debt, he transfers to his Creditor a debt due to him from the banker. If the Creditor agrees to receive the Notes in payment of his Debt the Debtor is discharged, and the Creditor agrees to take the banker as his Debtor. So with a Cheque.

So when a Debtor gives his Creditor a Bill of Exchange upon another person in payment of his own Debt.

So if a Debtor and Creditor are customers of the same bank, the Debtor may give his Creditor a Cheque on his account in payment of a Debt. If the Creditor accepts the Cheque he pays it into his account: the banker transfers the Credit from the account of the Debtor to that of the Creditor. As soon as this is done the Creditor is paid just the same as if he had been paid in Money. The transaction between the Debtor and the Creditor is finally closed, even though the banker should fail immediately afterwards; the Debt of the banker to the Transferor is discharged, he becomes Debtor to the Transferee; the Transferor is released from his debt to the Transferee, who accepts the banker as his new Debtor.

This form of Novation is termed **Transfer**.

This Novation is equivalent to a Payment in Money.

When the Debtor's Debtor agreed to the transfer of the Debt, he was called *Delegatus*, and the transaction was termed *Delegatio*.

So Ulpian says (*Dig.* 50, 16, 187)—“*Verbum exactæ pecuniæ non solum ad Solutionem referendum est, sed etiam ad Delegationem.*”

So Basil, 25, 5, 56—“*ῥῆμα τῶν ἀπαιτηθέντων χρημάτων οὐ μόνον εἰς καταβολὴν ἀναφέρεισθαι δεῖ, ἀλλὰ καὶ ἐς ἔξταξιν.*”

“*The word Payment includes not only Payment in Money, but also the Transfer of a Credit.*”

So also—“*Solvit et qui reum Delegat.*”

“*He also pays who transfers another Debtor.*”

Also — “*Delegare est vice suâ alium dare Creditori, vel cui jusserit.*”

“*To delegate is to give another Debtor instead of one's self to the Creditor, or to his order.*”

The most striking example of the use of Novation in modern commerce is the use of Bank Notes and Cheques, by which almost all payments are made. All transfers of Credit in the same bank, and the Clearing-house, which, by an ingenious mechanism, transfers Credits from bank to bank exactly in the same way as Credits are transferred from one account to another in the same bank, are Novations. The prodigious amount of business settled in this way may be judged of by the fact that in the London Clearing-house alone Credits to the amount of £7,000,000,000 are annually transferred between the London banks; and besides that there is the country Clearing-house, and every city in the country has its own. By this means, with the constantly increasing habit of keeping banking

accounts, these Banking Credits have now become for all practical purposes the **Current Coin of the Realm**.

A Novation when effected by persons living in different places, is known by the technical name of "An Exchange." A person living in one country may be Debtor to one person living in another, and Creditor to another. He may pay his Creditor by sending him a Bill, or Order, on his Debtor, and thus the Obligations are extinguished. The mass of reciprocal transactions of this nature which take place between different countries is called the Foreign Exchanges (**Exchange**).

PATENTS.

A **Patent** is one form of Incorporeal Property, and of a Property in Ideas. It is a Right granted by letters patent from the Crown for the exclusive making, using, and selling some commodity, restricted in modern times by Statute to a new invention.

Formerly the Crown claimed the prerogative of granting and selling to private individuals the exclusive Right of importing, manufacturing, and selling commodities.

This abuse proceeded to great lengths under Elizabeth. The revenues granted to her by her Spiritual and Temporal Parliaments together amounted to only £65,000 a year. To eke out these scanty resources, in the seventeenth year of her reign she revived the old system of granting patents for trade monopolies. Almost every conceivable ware—even the writing of Latin grammars—was made a monopoly. These became so oppressive that strong remonstrances were made in the Parliament of 1597. These produced little effect, and monopolies continued to increase. At last, in the Parliament of 1601, a stern and fierce onslaught on them was organized. Bacon, Fleming, and Cecil vaped about the prerogative of the Crown as something so divine that it was to be neither examined, canvassed, nor discussed. But the House was not terrified, and Cecil acknowledged that in all his experience he had never seen such a commotion in the House. The Queen, discerning the true temper of the people, with her usual tact, thanked the House for its care of the public weal, and promised that these abuses should be put a stop to. But they were revived under James I. At last the Statute 21 James I. c. 3 was passed, that all monopolies of trade were contrary to the fundamental laws of the realm, and they were prohibited in future, except only that

the Crown was empowered to grant letters patent for a period not exceeding fourteen years to the first and true inventor of any new manufactures within the realm, which were not used by anyone else at the time of granting the letters. And the principle, with some modifications, still holds good.

This kind of Right, though usually classed along with Copyright as being a Right or Property in ideas, is surrounded with far greater difficulties, and its expediency is more disputable, than that of Copyright.

It might be said that as each is the fruit of a man's own Labour, he should be entitled to equal Property in them. This argument, though somewhat specious, is not conclusive. No two persons working independently on the same literary work ever produce the same ideas. It would be a very remarkable circumstance if two persons should ever hit independently on the same line of poetry, or construct a sentence of moderate length exactly the same, word for word. It would be absolutely incredible that two persons, writing independently, should ever compose ten consecutive lines of poetry, or write half a page of prose, word for word the same. Even, therefore, if they chose the same subject for a poem, or a drama, or a history, the work of each would be absolutely independent. But when many persons' minds are bent on Science or Inventions the case is different. Different persons, thinking independently, constantly hit upon the same ideas in Science and Inventions. It has often been remarked that if the greatest names in Science had never lived, someone else would have hit upon their discoveries.

A literary work is, therefore, more peculiarly a man's own Property than a work of Science. If Shakespeare had never lived, there is no reason to suppose that we should ever have had a *Macbeth*, *Hamlet*, or *Othello*. But if Newton had never lived, there is every reason to suppose that by this time the Law of Gravitation would have been proved. In Science one man's discoveries are based upon the labours of his predecessors, and in turn his labours are the basis of the labours of his successors. He therefore adopts and uses the common property of mankind, and in return his discoveries become the common property of mankind. And thus there is constant progress in science ; but there is no such constant progress in literature.

It is with Invention as with Science. In this inventive age, when so many men's minds are turned towards the same subjects, they constantly hit upon the same invention. Inventions grow out of

one another ; and in the construction of some complicated machine an inventor walks among traps and pitfalls at every step, and must carefully beware lest someone else has not already hit upon the same idea, and got a patent for it. The practical evils of this are so great that many able persons, including many distinguished inventors, have strenuously argued in favour of the total abolition of patents. This, however, opens a very wide question, which this is not the place to discuss. We have only to explain the nature of Patents as Incorporeal Property, and not to argue about their expediency.

There is one peculiarity about the law of Patents which is worth noticing. No man can have a property in a general truth or principle, but only in some application of it ; that is, no one can have a patent for a *Discovery*, but only for an *Invention*. As soon as a general principle is discovered it becomes universal property, and everyone can appropriate to himself any new demonstration or application of it he can devise. No one can appropriate to himself a general scientific truth, nor can he have a patent for a principle. Thus no one can monopolise the general principle that steam, air, or electricity can be used as motive powers : all he can have is Property in some particular form of machine in which the general principle is applied.

PAYMENT AND SATISFACTION.

The words **Payment** and **Satisfaction** are often supposed to be synonymous, but they are not so.

The word Payment means anything whatever which is taken in exchange for anything else.

It originally came from the Sanskrit *Paç*, which is the same word as the Greek *πήγω*, Doric *πάγω*, *πήγνυμι*.

In old Latin this was *Pago* or *Paco*, the same as *paciscor* ; and also *pango*, *pegi*, or *pan.xi*, *pactum*, to covenant, agree with, or come to terms with.

Thus it is said in the Laws of the XII. Tables—

“Rem ubi pagunt, orato” : “*If they come to terms, let it be settled as agreed upon.*”

“Ni pagunt, in comitio aut in foro ante meridiem causam conjicito” : “*If they do not come to terms, bring the cause on before midday in the comitium or forum.*”

Hence *pacare* is to come to terms with, to appease ; hence the Italian *pagare*, and our *pay*.

When one person has parted with anything else to another person, or done him a service, he is entitled to receive from him some equivalent, unless it was meant as a donation ; but at the same time he has the right to accept **anything** he pleases as an equivalent.

Thus, where two persons agree to exchange any material products, each is the payment for the other, because each product satisfies and appeases the claim of the other for an equivalent. When goods are paid for in Money, it is sometimes supposed that it is only the Money which is Payment for the goods, but the goods are equally payment for the Money, because each person has got what he agreed to take in exchange for his product.

So when Money is paid as Wages for work done, the Money is Payment for the work, but the work is equally Payment for the Money.

So when persons agree to exchange different kinds of work, each is Payment for the other.

So when a merchant agrees to take a trader's Bill at three months in exchange for goods, the Bill is Payment for the goods ; it appeases the claim of the merchant, because he has agreed to take a Right of Action in exchange for the goods, and the goods are equally Payment for the Right of Action.

When the Bill becomes due the trader has to pay his Bill : that is, he has to appease the claim which the holder of the Bill has for Money ; and, when he pays the Bill, he buys up the Right of Action against himself.

The Money is the Payment for the Right of Action, and the Right of Action is Payment for the Money.

Hence to **Pay** means simply to appease ; when a man *pays* his Debt he appeases the Right or Claim, which his Creditor has to demand a sum of money from him. When he *pays* his Rent, he appeases the Right which the owner of the house or land has against him for compensation for its use.

But it does not follow that a Payment is a final closing of the transaction. The only legal word which denotes a final closing is **Satisfaction**. If a Bill is taken in exchange for goods it is **Payment** ; but it is not **Satisfaction** (unless it is expressly received as such) until the Bill itself is paid.

If, however, the owner of the Bill neglects to follow up his legal remedy, the Bill becomes not only Payment, but Satisfaction : by so doing, the owner of it has made it Money.

And Economists go further. They say that Money itself

is only a higher order of Bill; that though when a person has received Money it is Payment, it is not Satisfaction until he has exchanged away the Money for some object he desires.

Thus, though a shoemaker is paid when he has got Money for his shoes, yet he has not got a Satisfaction until he has got bread, or meat, or clothing, or something else he desires for the Money.

On Payment in Money.

We will now explain how a Payment in Money extinguishes a Debt, which very few persons have ever thought of.

Suppose that a person possesses £100, and owes a Debt of £30, then his property will be (+ £100) and (− £30): that is, he possesses £100, but coupled with the Duty to pay £30 at some given time.

His Creditor's Right to demand is (+ £30).

When the Creditor demands payment of his Debt he brings his Right of Action to the Debtor, who gives him £30 in money in exchange for it: that is, the Debtor buys up the Right of Action against himself.

The Debtor's property is then £70, and also (+ £30) and (− £30): that is, £70 in money; and also the Right to demand £30 from himself, and the duty to pay £30 to himself.

This is an example of *Confusio*: and the (+ £30) and the (− £30) cancel and extinguish each other by either of the three methods described under *Acceptilatio*: the obligation is extinguished: and the Debtor's property is now £70.

This transaction is, therefore, a Sale or an Exchange.

Thus the Obligation, or Contract, was originally contracted by the Sale, or Exchange, of the *Mutuum*: and it is extinguished by the Sale, or Exchange, of Payment.

Thus an Obligation is created by one Exchange: and is extinguished by another Exchange.

This is the rationale of Payment in Money; but there are other methods of Payment described under *Novation* and *Compensation*; and it is by the two latter methods that Bills of Exchange are almost exclusively paid in this country. Payment of Bills of Exchange by Money has almost gone entirely out of use in this country in modern times.

PERSONA.

It will be very useful to understand the meaning of **Persona** in Roman Law.

The word *Persona* means any single person, or any society of persons, who can enjoy and exercise Rights, and who are subject to perform Duties.

Thus in a partnership, each individual member is a *Persona* ; but the partnership itself is also a *Persona*, quite separate and distinct from its individual members.

Hence each member of the partnership can buy and sell with the partnership as separate *Personæ*.

So a Joint Stock Company is a *Persona*, and when the individual members of it pay their money to it, the property in the money is gone from them individually, and vests in the company as a distinct *Persona*.

The separate members can buy and sell and traffic with the company as with a separate individual. Thus the individual members of a Joint Stock Bank keep their accounts with it, and bank with it as a distinct *Persona*. And the company has Rights and Duties quite separate from those of its individual members.

So the State is a *Persona*, quite separate and distinct from its individual citizens, and they can lend money to the State as to a separate individual.

So every Municipal or Incorporated body is a *Persona*, quite distinct from its individual members.

The Parson of the parish is the *Persona* who has the Right to receive certain dues, as a consideration for performing certain ecclesiastical Duties ; and this right is termed a benefice.

Thus a *Persona* may be defined to be the centre of Rights and Duties.

Many separate individuals may make up one juridical *Persona* ; and one individual may combine several *Personæ*, or legal characters.

Thus Cicero says (*De Oratore*, ii. 24)—“Itaque tres personas susteneo summâ æquanimitate meam, adversarii, judicis.”

“Thus I sustain three characters with the greatest equanimity, my own, my opponent's, and the judge's.”

Thus one person may be the executor of one person, the trustee of another, and the guardian of another. In each of these characters he is a separate *Persona*, with a distinct set of Rights

and Duties. And he may buy and sell with himself in each of these separate *Personæ*, or characters. Hence all exchanges take place between separate *Personæ*.

When an individual combines several *Personæ*, he may act in each *Persona* as a separate individual, which leads sometimes to somewhat curious consequences.

He may not only buy and sell with himself, but he may come into legal collision with himself in consequence of fulfilling these several characters; of which we may give an amusing instance:—

The right of salmon-fishing is a sore subject with Scottish littoral proprietors. Salmon is claimed as a royal fish in Scotland. On one occasion a great Scottish proprietor found himself in collision with the Crown on a question of salmon rights. The action was against the President of the Board of Trade. But in the whirligig of politics, the noble Duke found himself President of the Board of Trade; so that the Duke, as a great salmon-proprietor, found himself suing himself as President of the Board of Trade, and guardian of the interests of the Crown.

It is not unusual for Indian officials to be the heads of several offices, and many amusing stories are told of their finding themselves in collision with themselves as to the Rights and Duties of their several offices, and of the hostile correspondence they carry on with themselves in their several *Personæ*.

Lord Farrer has supplied me with a tragi-comic example of this: "There was a Treasurer in one of the West Indian Islands who was also Attorney-General. As Treasurer he committed peculation, and was prosecuted by the Governor. The lawyers being scarce, he applied for leave to draw his own indictment; obtained leave; drew the indictment; received a fee for it; and was convicted on it."

So a banker who has rediscounted a bill accepted by his customer, payable at his bank, may pay the bill either as indorser or as agent for the acceptor, and take time to consider in which capacity, or *persona*, he does so.

So a clergyman may read the marriage service at his own marriage, in the *personæ* of clergyman and bridegroom.

So when a Railway company carries materials for its own use it is both its own carrier and its own customer. It takes the money out of one drawer as expenditure, and puts it into another as revenue.

It has sometimes happened that a magistrate has unwittingly committed a breach of the law, and in his *persona* of magistrate has publicly fined himself in his *persona* of culprit.

So one individual may be both Creditor and Debtor. He is an

active agent as regards his Debtor, and a passive agent as regards his Creditor.

But his Creditor may put his debts against him into circulation. When it is presented to him for payment he buys up the Right of Action against himself. He then becomes both Creditor to himself and Debtor to himself.

This is called *Confusio* in Roman Law, and has given rise to a good deal of juridical perplexity.

What is a POUND?

In the great Currency debates in the Great War many curious notions were started as to what a "Pound" is. Sir Robert Peel once asked the question, "What is a Pound?" and he found a good many persons who could give him no answer. We have now to explain how a certain weight of gold has come to be called a **Pound**.

The original Measure of Value instituted by Charlemagne was the Pound weight of Silver Bullion. This was adopted in all the countries of Western Europe, France, England, Italy, Spain, and Scotland.

No coin of this actual weight was ever struck, but the Pound weight was divided into 240 coins, called *Denarii*, or Pennies; twelve of these Pennies were termed a *Solidus*, or Shilling, and therefore 20 Shillings, or *Solidi*, actually weighed a Pound of Silver Bullion.

Now let us denote the Pound weight of silver in the form of Bullion by the symbol—lb., and the Pound weight of silver in the form of Coin by the symbol—£; then we have—240 Pennies = 20 Shillings = £1 = 1lb. Now if the Pound weight of silver were divided into more than 240 Pennies, it is clear that the greater number of Pennies would still be equal to the Pound of Silver, and if we denoted 240 Pennies by the symbol—£, irrespective of their weights, we should have the—lb. = £1 + the number of Pennies above 240.

This is what has been done in all the countries above mentioned. The Sovereigns of these countries were frequently in want of money to pursue their various extravagances. As they could not increase the quantity of the metal, they adopted the fraudulent plan of surreptitiously cutting the Pound of Silver into a greater number of Pennies. But they still called them by the same name. By this

means they gained an illusory augmentation of wealth. As they could not increase the quantity of the metal, they at various periods *falsified the certificate*, while they still called the Coins by the same name.

The consequence of this was manifest. As 240 Pennies were still called a Pound in Money, or £, whatever their weight was, and as more than 240 Pennies were coined out of the Pound of Silver, or lb., the £, or Pound of Silver in Coin, began to vary from the lb., or Pound weight of Silver.

Edward I. began this bad practice in 1300; he coined 243 Pennies out of the Pound weight of Silver; in 1366 Edward III. coined 266 Pennies out of the Pound weight of Silver; in 1412 Henry IV. coined the Pound of Silver into 360 Pennies; and so it gradually crept up, until Elizabeth in 1601 coined the Pound of Silver into 744 Pennies, at which it remained till 1816.

Then we have manifestly :—744 Pennies = 62 Shillings = £3 2s = 1 lb.

As there are 12 ounces in one Pound-weight of Silver, it is evident that each ounce was coined into 62 Pennies; and as the Value of Bullion is measured by the ounce, the Mint Price of Silver was said to be 5s. 2d. per ounce.

In Scotland this depreciation of the coinage began about the same period as in England, but it proceeded to much greater lengths. In 1306 Robert Bruce coined the Pound of Silver into 252 Pennies; in 1451 James II. coined it into 760 Pennies, or £3 4s., and the depreciation was continued until in 1738 the Pound of Silver was coined into 8928 Pennies, or £37 4s., and thus the Pound Scots became equal to twenty pence.

In France and Italy the depreciation proceeded twice as far as in Scotland. The French *livre* and the Italian *lira* were at last reduced to tenpence. The French *livre*, which is now called a *franc*, has been adopted as the basis of the decimal system of coinage, and the *solidus* has dwindled down to the *sou*, or half-penny.

At the great re-coinage in 1816 it was resolved to adopt the principles of Petty, Locke, Harris, and Lord Liverpool, and make Gold as the single standard of England; and the Sovereign, or Pound, in Gold was coined to be equal to 20s. in Silver, at the then market Value of Gold and Silver.

Ever since the time of Charles II. the coinage of Gold has been free to the public. But by the Act of 1816 the coinage of Silver

and Bronze is retained in the hands of the Government. In order to obviate the effects of what is termed Gresham's Law (**Gresham's Law**), the value of the Silver coinage has been artificially raised. Since 1816 the Pound-weight of Silver has been coined into 66 shillings, but four of these are retained for the expenses of coinage, and the 62 lighter shillings are declared to be of the same value as the previous heavier ones. Thus 20 of them are declared to be equal in value to the Sovereign, or Pound, and thus their value was artificially raised about 6 per cent. This, of course, refers to the relative value of Gold and Silver in 1816; at the present time the market value of the silver in a shilling is about 5d. But to prevent injustice being done, they are not legal tender for more than 40s., it having been intended to make the double sovereign the monetary unit.

This country now enjoys the most admirable system of coinage ever devised by the ingenuity of man, and as a proof of its excellence, while all the countries which attempted to make Gold and Silver equally legal tender to an unlimited amount when coined at a fixed ratio, were thrown into confusion and perturbation by the recent changes in the value of these metals, the Coinage of this country has passed through the whole of the protracted crisis with the most perfect tranquillity. He would be a bold and daring Minister indeed who would undertake to disturb our present system of Coinage.

PRACTICE.

A Practice is one form of Incorporeal Property. When a professional man has established a successful business, he has gathered round him a certain number of regular clients, and hopes to acquire more. The expectation of future profits from these clients has a certain value, and may be sold to strangers. It is the *emptio spei* of Roman Law. It is property analogous to the goodwill of a trader, the copyright of a book, a patent, and a share in a commercial company. It is very usual for a young doctor, surgeon, or solicitor, instead of waiting to build up a practice of his own, which may take years to do, to buy an established practice. This is an investment of Capital, and the practice so purchased becomes his Capital.

PRICE.

When any Economic Quantity is exchanged for any other Economic Quantity, each is termed the Value of the other. But when one or both of the Economic Quantities exchanged is Money, or Credit, it receives a special name—it is termed **Price**. Hence, Price is always Value expressed in Money or Credit.

The Value of Money is any other Economic Quantity which can be obtained in exchange for it: either a material chattel: or a service: or an abstract Right, such as a Debt.

If Money be taken as the fixed Quantity, the *more* of the other Quantity which can be obtained in exchange for it, the **Greater** is the Value of Money. The *less* of the other Quantity which can be obtained for it, the **Less** is the Value of Money.

Or if the other Quantity be taken as the fixed Quantity, the *less* the Money which is given for it, the **Greater** is the Value of Money: and the *more* the Money given for it, the **Less** is the Value of Money.

Hence it is seen that—*The Value of Money varies Inversely as Price.*

But Rights of Action, Credits, or Debts, are Goods, Chattels, Commodities, Merchandise which are brought into commerce, and bought and sold, or exchanged, like any other merchandise.

Now when commodities, or merchandise, are brought into commerce, they are always divided into certain Units for the sake of convenience of sale. Coals are sold by the ton: corn by the quarter or other measure: tea and sugar by the pound: cloth by the yard: wine and other liquids by the gallon, quart, or pint, etc.

So for the convenience of commerce Bullion is divided into Units, called coins.

In a similar way when the Commodity or Merchandise, termed Credit, or Debt, is brought into commerce, it must, for the convenience of trade, be divided into Units.

The Unit of Credit, or Debt, is the Right to Demand £100 to be paid one year hence.

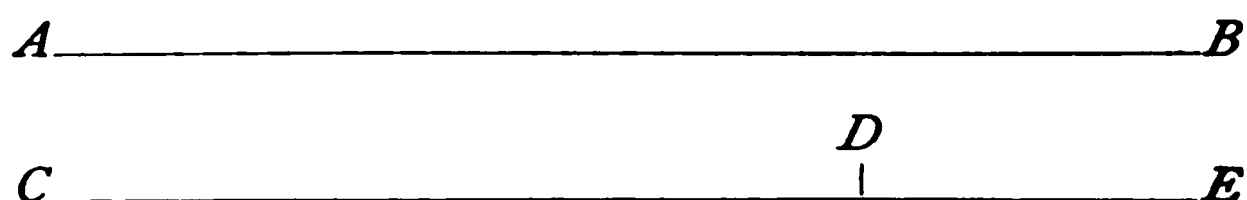
The sum of Money given to purchase the Unit of Debt is also termed its Price. And as in all sales, the less the quantity of Money given to purchase the Unit of Debt, the greater is the Value of Money: and the greater the quantity of Money given to purchase the Unit of Debt, the less is the Value of Money.

Hence the Value of Money, with respect to Debts, varies exactly in the same way as it does with respect to any other merchandise.

But in the commerce of Debts it is not usual to estimate the Value of Money by the quantity of Debt it will purchase. As Money naturally produces a profit, it is clear that the Value, or Price, of a Debt, to be paid only one year hence, must be less than the actual amount of the Debt. The difference between the Present Value, or Price, of the Debt and the amount of the Debt is the Profit made by buying it.

This difference or Profit is termed **Discount**.

As dear old Horace says that it is more easy to understand things addressed to the faithful eyes than those things only addressed to the ears, the following figure will make the matter clearer :



Let AB be the unit of Debt.

CD be the amount of Money given for it : *i.e.*, its Price.

DE be the difference between the Price of the Debt and its amount : *i.e.*, the Discount.

In the commerce of Debts it is invariably the custom to estimate the Value of Money by the Discount, or Profit, it yields : and not by the Price of the Debt.

Now as the Price of the Debt decreases, or increases, it is evident that the Discount increases or decreases.

Hence in the commerce of Debts—

The Value of Money varies Directly as the Discount.

This rule embraces both branches of commerce—

The Value of Money varies Inversely as Price, and Directly as Discount.

To Discount a Debt is to buy it by paying down the Present Value of its amount payable at a future time.

Hence it must be observed that the term Value of Money has two meanings in commerce. There are three great branches of commerce : the commerce in material commodities : the commerce in labour or services : and the commerce in abstract Rights. And the expression “Value of Money” has two distinct meanings as it is applied to these three branches of commerce. In the commerce in material commodities and in labour and in abstract Rights,

except Debts, it means the quantity of the commodity or the labour or the abstract Right it can purchase. In the commerce of Debts it means the **Discount** or **Profit** made by buying the Debt.

Confusion of Mill on the expression Value of Money.

Mill has a long and utterly inept tirade against the double meaning of the expression Value of Money.

He says (Bk. 3. ch. viii. § 1): "It is unfortunate that in the very outset of the subject we have to clear from our path a formidable ambiguity of language. The value of Money is to appearance an expression as precise, as free from possibility of misunderstanding, as any in science. The value of a thing is what it will exchange for; the value of money is what money will exchange for—the purchasing power of money. If prices are low, money will buy much of other things; and if of high value—if prices are high—it will buy little of other things, and is of low value. The value of money is inversely as general prices—falling as they rise, and rising as they fall.

"But, unhappily, the same phrase is also employed in the current language of commerce, in a very different sense. Money, which is so commonly understood as the synonyme of wealth, is more especially the term in use to denote it when it is the subject of borrowing.

"When one person lends to another, as well as when he pays wages or rent to another, what he transfers is not the mere money, but a right to a certain value of the produce of the country, to be selected at pleasure; the lender having first bought this right, by giving for it a portion of his capital. What he really lends is so much capital; the money is the mere instrument of transfer. But the capital usually passes from the lender to the receiver, through the means either of money, or of an order to receive money, and, at any rate, it is in money that the capital is computed and estimated. Hence, borrowing capital is universally called borrowing money; the loan market is called the money market; those who have their capital disposable for investment, or loan, are called the moneyed class; and the equivalent given for the use of capital, or, in other words, interest, is not only called the interest of money, but, by a *grosser perversion of terms, the value of money*. This misapplication of language, assisted by some fallacious appearances, has created a general notion among persons in business that the Value of Money, meaning the rate of interest, has an intimate connection with the Value of Money

in its proper sense, the value or purchasing power of the circulating medium."

It will be seen by the preceding exposition, that there is no ground whatever for Mill's calling the expression Value of Money, as applied to the rate of interest, a perversion of language, and an ambiguity. It all arises from Mill's not understanding the nature of the operation. Rights of Action, Credit, or Debts, are goods and chattels, vendible commodities, merchandise, just like any material chattels, and, as we have shown, the Value of Money varies with respect to them, just in the same way as it does with respect to any other chattels. The only thing is that it is expressed in rather a different way. So that there is no ambiguity nor perversion of language.

PRODUCTION.

The word **Production**, as a technical term in Economics, comes from the Latin *producere*, which means to lead or bring forth, or to expose for sale.

Thus Thais, in the *Eunuchus* of Terence, says (Act I. 1, 90)—

"Anchillas, servos . . .

Omnes **Produx**i, vendidi."

"All the Slaves male and female I offered for sale, and sold."

So also Suetonius (*De illis. gram.*, c. 4) says—

"Quum familia alicujus produceretur."

"When any one's household slaves were offered for sale."

The original sense of **Produce** in English is exactly the same. It is to draw forth, to cause to come near. Thus in Isaiah, xli., 21, it is said—"Produce your cause with the Lord: bring forth your strong reasons, saith the King of Jacob"; and the marginal note says—"Produce—cause to come near."

So Antony, in *Julius Cæsar* (Act iii. sc. 1), says—

"That's all I seek,

And am moreover suitor, that I may

Produce his body in the market-place."

So, Albany says in *Lear* (Act v. sc. 3)—

"Produce their bodies, be they alive or dead."

So, when Mr. Montagu Tigg gives Mr. Jonas Chuzzlewit and party a dinner—"It was as good a one as Money (or Credit, no matter which) could **Produce**."

To **Produce**, is simply to bring forward something, and place it where it is wanted. If a witness is told to **Produce** a deed, or

document, in Court, it means that he is to bring it into Court, and place it there. A party to a cause **Produces** his witnesses in Court. A gaoler is ordered to **Produce** the body of his prisoner in Court, *i.e.* to place him there.

In the Universal language of commerce the **Producer** is the person who brings anything into the market, and offers it for sale. When the turn of the market is for or against the **Producer**, it means that it is for or against the Seller.

Hence the true and original meaning of **Production** in Economics is to place anything in the market, and offer it for sale. A thing may be produced in nature, but until it is offered for sale, it is not **Produced** in Economics.

A great poet may *produce* a great poem, a great artist may *produce* a great picture, a great sculptor may *produce* a great statue; we may estimate their merits most highly, they may be among the highest products of human genius, but how are we to estimate their Market Value? For Economics has nothing to do with them, except so far as regards their Market Value.

Hence, though the poem, the picture, or the statue, may be *produced* in nature, or called into existence; they are not **Produced** in Economics, until they are brought into the market and offered for sale.

So in French, the original and primary meaning of *Produire*, as Littré says, is *pousser en avant*; and of *production* it is *action de produire, de mettre en avant*.

A **Product** in Economics is **Anything** whatever which is brought into the market, and offered for sale, whether it be Material, Immaterial, or Incorporeal.

It has been too much the custom in Economics, especially in recent times, to think of the word Production only as meaning bringing something into existence. But when it is seen that Production means placing something in the market and offering it for sale, it is evident that the product must not only be called into existence, but transported from place to place.

Hence modern Economists expressly class *Transport* or *Circulation* as one form of Production.

Thus Destutt de Tracy¹ under Production includes changes of form and *place*.

J. B. Say enumerates *Transport* under the term Production. Michel Chevalier does the same. Mill, who gives the first book of his work to Production, in the sense of obtaining things from

¹ *Traité d'Economie Politique*, p. 82.

the earth, in a subsequent chapter says¹—"Improvements in *production*, understanding this last expression in its widest sense to include the *process of procuring commodities from a distance*, as well as that of producing them."

Hence Foreign Importers, Merchants, and Traders of all sorts, wholesale and retail, are **Producers**, because they transport commodities from one place to another, and offer them for sale in the place where they are wanted.

Three Classes of Economic Producers.

Now in general there are three distinct kinds of operations necessary before a Commodity can be placed in the market and offered for sale to the final purchaser, who purchases the finished product, and takes it out of commerce for personal use and enjoyment, who in the language of Economics is termed the **Consumer**.

(1) **Agricultural Producers.**—One class of persons obtains the rude produce from the earth—this class includes agriculturists, miners, hunters, fishermen, breeders of cattle, herds, &c.; these persons bring their products into the market and offer them for sale.

(2) **Manufacturing Producers.**—But when this raw produce is first brought into the market it is seldom fitted for final purchase and human use without undergoing several processes of manufacturing and fashioning.

Manufacturers of all sorts purchase the raw produce from its first or agricultural producers, and fashion and transform it by an infinity of processes, so as to render it fit for human use.

(3) **Commercial Producers.**—But after the raw produce of the earth has, by the various processes of manufacture, been rendered fit for human use, it has still to be transported from one country to another, and from one place to another in the same country, before it is placed in the market, and finally offered for sale to the consumer, who takes it out of commerce for his own use and enjoyment. These Commercial Producers include Foreign Importers, Merchants, and Traders of all sorts, wholesale and retail.

Now Money is used to effect all these operations, hence Money employed in any one of them is used as **Productive Capital**.

But Credit is also used in exactly the same way as Money to

¹ *Prin. of Pol. Econ.* bk. iv. ch. 3. § 1.

effect any of these operations. Hence Credit may be used in all respects like Money as Productive Capital.

Smith says that Capital may be employed productively in four different ways, and that all persons who are engaged in these operations are productive labourers.¹ But, unfortunately, though he enumerates several methods of employing capital productively, and several classes of persons whom he denominates *productive* labourers, he gives no *definition* of what Production is, and he is very inconsistent with himself on the subject of Productive Labour.

J. B. Say rightly adopted the extended meaning of productive labour given by Smith and Condillac, and felt it necessary to enlarge the original definition of the word. He says²—"We cannot create objects: the mass of matter of which the world is composed can neither be increased nor diminished. All that we can do is to reproduce these matters under another form, which makes them fit for some purpose which they had not before. Hence there is creation, not of matter, but of utility, and as this utility gives them value, there is *Production of Wealth*."

"This is the meaning of Production in Political Economy, and in this work. Production is not the creation of matter, but the creation of utility. It is not measured by the length, the volume, or the weight of the product, but by the utility which has been conferred. There is then truly Production of Wealth, where there is creation or increase of utility."

Say also adopts Smith's enumeration of Productive labourers: agricultural, manufacturing, and commercial: and he says that commercial industry contributes to production by raising the value of a product by its transport from one place to another.

So again he says³ that Production is to give a recognized value to anything which makes it capable of procuring something else in exchange of equal value; and that commercial production is the creation of a value obtained by the transport or the distribution to consumers of products already existing.

So again he says⁴—"We cannot bring out of nothing a single particle of matter; we cannot even send back a single particle into nothing; but we can call out of nothing the qualities which make matter, which had no value previously, acquire a value, and become wealth. It is in this that Production consists in Political Economy. There is the miracle of human industry: and the things to which value is thus given are termed PRODUCTS."

¹ Book ii. ch. 5.

² *Traité*, Book i. ch. 1.

³ Epitome at the end of the *Traité*.

⁴ *Cours*, Part i. ; Div. i. ch. 4.

“To create products, not being able to create matter, the action of industry is necessarily confined to separating, combining, and transporting the molecules of which it is composed. It changes the state of matter, and that is all: and by this change of state it makes it fit to serve us.”

Now so far as regards matter and material products, this is undoubtedly true; but J. B. Say himself makes immaterial products an integral part of Economics, and treats them as Wealth and Capital, just in the same manner as material products. He says that the sciences, and talents of professional men, are capital which give a revenue, and how are these sciences and talents formed out of the particles of matter? They are the pure products of thought. But those who provide them when they are wanted, are evidently as much producers as the producers of material products.

Say also admits Rights, such as Commercial Obligations of all sorts, Copyrights, &c., to be Wealth; but how are these Rights formed out of particles of matter?

Mr. Mill says¹—“The production of wealth: the extraction of the instruments of human subsistence and enjoyment from the materials of the globe.” And though the first book of his work is devoted to Production, he gives no further definition of it. In it he enumerates the different kinds of labourers whom he considers to be productive. However, in a subsequent part of his work he admits that transport in commerce is one species of production. He says²—“Improvements in production; understanding the last expression in its widest sense to include the process of procuring commodities from a distance, as well as that of producing them.”

So Malthus defines Production to be³—“The creation of objects which constitute wealth.”

So Destutt de Tracy says⁴—“Not only can we never create anything, but it is impossible for us to conceive what it is to *create* or to *annihilate*, if we rigorously understand by the words to make something out of nothing, or to reduce something to nothing; for we have never seen anything come out of nothing, or return to it. Thence the axiom admitted by all antiquity—Nothing can come from nothing, and Nothing can go back into nothing. What, then, do we do by our labour, by our action on all the things which surround us? Never anything but effecting on these things changes of form, or place, which apply them to our use, and which make them useful to the satisfaction of our wants. That is what we

¹ Preliminary Remarks.

² Book iv. ch. 3, § 1.

³ *Definitions in Political Economy*, p. 235. ⁴ *Traité d'économie politique*, p. 82.

must understand by *Producing*; it is to give things a utility they had not before. Whatever our labour may be, if it does not result in a utility it is unfruitful; if it results in one it is productive."

We need not give any more extracts, because it is certain that these sufficiently represent the general use of the word *Production* by Economical writers. Now we observe that the general drift of all these discussions on production is to consider the process by which the product is obtained. Now if this were a true view of the Economic meaning of *Production*, it would follow that when we treated of the "Production of Wealth" in Economics, we should have to investigate the whole science and art of agriculture, of mining, and all the processes in manufactures of every description, and all trades, because all these things are the production of wealth according to the definition given above. But this is a complete error. Every Economist would at once say that this is a complete misconception of the subject. Economics has nothing to do with any of the processes of agriculture, mining, manufacturing, or the handicraft of any workman, but only with the *value* of the product when obtained. A product does not enter into the science of Economics until it enters into commerce, and seeks to be exchanged; and the sole purport and aim of Economics is to determine the relative quantities of other products it can be exchanged for. The earliest Economists over and over again said that the science has nothing to do with products which are obtained and enjoyed by their producers without being exchanged. And Whately,¹ Bastiat,² and Perry,³ already quoted, clearly enforce the same doctrine. By dwelling so much, therefore, on the process of obtaining products, these Economists have given a wrong direction to the ideas of their readers, so far as regards Economics, and we must now ascertain what is the true Economic meaning of *Production*.

But man has many other wants besides physical ones, which can be gratified with material substances. He wants services and enjoyments of many kinds, and he is willing to give something in exchange for, or to pay for, these services and enjoyments; and those persons who can render these services, or supply these enjoyments, are equally Producers as those who produce material substances.

Thus men want to be protected in their legal rights, and to have disputes among them settled, or to be healed of diseases, or services of many other descriptions too long to enumerate; and so some

¹ p. 100.² p. 101.³ p. 122.

men bestow their labour in acquiring a knowledge of law, of medicine, of civil engineering, and all the other various professions and sciences, and are ready to *produce* or offer these services in exchange for something else.

So people like the enjoyment of seeing acting and dancing, or hearing music, and therefore some men bestow their labour in acquiring skill in these things, and offer them in exchange for payment.

Now the meaning of every term must be fixed and appropriated in every science in a manner which is suitable to that science, and nothing is more common than for the same word to have different technical senses in different sciences ; and therefore we say that though in treating of the arts of agriculture, mining, or the various manufactures and trades, the word Production may very aptly be applied to the various processes of the different trades, yet such a meaning is not suitable to the science of Economics, and that the only true meaning of “**Produce**” in Economics is to offer for sale, and that the true Economic meaning of Production is simply offering for sale.

PRODUCTIVE AND UNPRODUCTIVE LABOUR.

There is no part of Smith’s work which has been so universally condemned, even by his warmest admirers, or in which he is so contradictory to himself and to common parlance, as in his doctrine of Productive and Unproductive Labour.

The Economists restricted the term Productive Labour to obtaining an increase of quantity of the raw products of the earth. All other labourers, all artificers, all merchants and traders, they classed as sterile, or unproductive, because they said that in commerce there was only an exchange of equal values ; and in manufactures, that the increased value bestowed on them by the labour of the artisans only replaced the products consumed by them during the work, and therefore in neither case was there any increase of Wealth. This designation of so many and powerful classes of society as sterile and unproductive labourers, raised a great clamour against them, as if they had meant it as an insult. But the Economists justly replied that they did not mean this term in a disparaging or humiliating sense, but purely as a matter of scientific classification. They acknowledged that the labour of these classes was honourable, useful, and indeed indispensable, but they did not term it as

Productive, in a scientific sense. Their answer was perfectly just, but their scientific classification was soon demonstrated to be erroneous.

Among others Adam Smith attacked it, and says (*Wealth of Nations*, Book 4, ch. ix.), "The third is the class of artificers, manufacturers, and merchants, whom they endeavour to degrade by the humiliating appellation of the barren or unproductive class." We shall soon see whether Smith has not fallen into exactly the same error as he charged against the Economists.

He says (Book 2, ch. iii.), "There is one sort of labour which adds to the value of the subject upon which it is bestowed; there is another which has no such effect. The former, as it produces a value, may be called productive, the latter, unproductive labour. Thus the labour of a manufacturer adds generally to the value of the materials which he works upon, that of his own maintenance and of his master's profits." Smith then enlarges the term Productive Labour to include manufacturing and commercial labour of all sorts, as well as agricultural. But there he unaccountably stops, and bars all other labourers as unproductive, or, in his own words, endeavours to degrade them by the humiliating appellation of barren or unproductive.

In continuation of the passage just given, he says, "The labour of a menial servant, on the contrary, adds to the value of nothing. Though the manufacturer has his wages advanced to him by his master, he in reality costs him no expense, the value of these wages being generally restored with a profit in the improved value of the subject upon which his labour is bestowed; but the maintenance of a menial servant is never restored. A man grows rich by employing a multitude of manufacturers; he grows poor by maintaining a multitude of menial servants. The labour of the latter, however, has its value, and deserves its reward, as well as that of the former; but the labour of the manufacturer fixes and realizes itself in some vendible commodity, which lasts for some time, at least, after that labour is past. It is, as it were, a certain quantity of labour stocked and stored up, to be employed, if necessary, upon some other occasion. That subject, or what is the same thing, the price of that subject, can afterwards, if necessary, put into motion a quantity of labour equal to that which had originally produced it. The labour of the menial servant, on the contrary, does not fix and realize itself in any particular subject or vendible commodity. His services generally perish in the very instant of their performance, and seldom leave any trace or value behind them, for which an equal quantity of service could afterwards be procured."

Now, according to Smith, the cook at an hotel is a productive labourer; she prepares, dresses, and cooks the food eaten by the guests. Her labour, according to Smith, adds to their value, and is charged for in the bill; it is fixed and realized in a vendible commodity which lasts for some time after that labour is passed, and her labour tends to the profit of the landlord, and her wages are all repaid to him in his customer's bills.

But a cook in a gentleman's family, who performs the very same functions, is a menial servant, and therefore, according to Smith, she is an unproductive labourer. Where is the sense of such a distinction? By Smith's own doctrine, the various articles of food are more valuable after she has dressed them for table, than they were in the raw state. Her labour is fixed and realized in material commodities which last after that labour is past. When these two persons perform exactly the same functions, and are equally paid for their services, why is the one productive, and the other unproductive? So that if the cook in an hotel takes a place in a gentleman's family, she is at once turned from a productive to an unproductive labourer! If a cook in a private family takes a place in an hotel, she, from an unproductive, becomes a productive labourer! It is obvious that such a distinction is mischievous, futile, and contrary to common sense.

Again, Smith allows that all the various persons engaged in extracting the coal from the mines, transporting it to distant places, and placing it in a gentleman's cellar, are productive labourers; but the footman who carries it from the cellar to the drawing-room grate is a menial, and therefore an unproductive labourer. By Smith's own doctrine, the labour of each of the series of persons who extract and transport the coal to the cellar adds to its value, and therefore, for the same reason, the labour of the footman who carries it from the cellar to the drawing-room adds to its value. The *terminus à quo* the coal starts is the mine, the *terminus ad quem* it is to arrive is the drawing-room grate; and why is the labourer who transports it from the mine to the cellar productive, and the labourer who transports it from the cellar to the grate unproductive? Why is the line of ignominious demarcation between productive and unproductive labour drawn at the coal cellar? Both labourers are engaged in the same series of operations; the labour of each is equally necessary and equally paid for. It is obvious that such a distinction is mischievous, futile, and contrary to common sense.

Now, why does a gentleman pay for a cook in an hotel, or in his own house, to dress his dinner? Simply to save himself the trouble

of doing it for himself. Why does he pay the price for miners obtaining the coal and dealers transporting it from place to place? And why does he pay wages to his footman to carry coal from the cellar to the drawing-room? Simply to save himself the trouble of doing so himself. And the same course of argument applies to everything else which is wanted and paid for. Now, here are services wanted, demanded and paid for, and yet some are called productive, and others unproductive. Is not this plainly contrary to all scientific classification?

Smith then continues — "The labour of some of the most respectable orders in the society is, like that of menial servants unproductive of any value, and does not fix and realise itself in any permanent subject or vendible commodity, which endures after the labour is past, and for which an equal quantity of labour could afterwards be procured. The Sovereign, for example, with all the officers, both of justice and of war, who serve under him, the whole army and navy, are unproductive labourers. They are the servants of the public, and are maintained by a part of the annual produce of the industry of other people. Their service, how honourable, how useful, how necessary soever, produces nothing for which an equal quantity of service can afterwards be procured. The protection, security, and defence of the commonwealth, the effect of their labour this year, will not purchase its protection, security, and defence for the year to come. In the same class must be ranked some both of the gravest and most important, and some of the most frivolous professions: churchmen, lawyers, physicians, opera singers, opera dancers, &c. The labour of the meanest of these has a certain value, regulated by the very same principles which regulate the value of every other sort of labour, and that of the noblest and most useful produces nothing which could afterwards purchase or procure an equal quantity of labour. Like the declamation of the actor, the harangue of the orator, or the tune of the musician, the work of all of them perishes in the very instant of its production."

Now, in reference to what Smith says about the protection, security, and defence of the commonwealth purchased by the labour of soldiers and sailors one year, not purchasing its security and defence the year after, we may observe that the food a man eats one year, or the clothes and the fuel which keep him warm one year, will not keep him in life and warmth for the year to come; and yet Smith classes those who produce food, clothes, and fuel, as productive labourers, and those who produce security and defence as unproductive labourers. Can anything be more futile?

Smith is, moreover, utterly inconsistent with himself, for he himself classes as wealth (Bk. 2, ch. i.) "the acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such talents by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person. These talents, as they make part of his fortune, so do they likewise of that of the society to which he belongs. The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labour, and which, though it costs a certain expense, repays that expense with a profit."

Again, he says (Bk. 1, ch. x.), "A man educated at the expense of much labour and time, to any of these employments which require extraordinary dexterity and skill, may be compared to one of these expensive machines. The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital."

He also says, "A man is rich or poor according to the degree in which he can afford to enjoy the necessities, conveniences, and amusements of human life."

Surely, therefore, those men who can produce those sciences, knowledge, and amusements, which Smith acknowledges to be wealth, are productive labourers.

Accordingly, J. B. Say extended the term Productive to include all labour which is required and paid for (*Traité*, 51, chap. vii.)—"Whatever be the operations to which labour is applied, it is productive, because it aids in the creation of a product. Thus the labour of the man of science, who makes experiments and books, is productive; the labour of the undertaker, although he does not directly apply his hand to the work, is productive; in short, any manual industry, from the labourer who digs the earth, to the sailor who handles a ship, is also productive."

So also (*Építome at the end of Traité*)—"Labour, a continued action directed towards an object. Labour is productive when it gives to anything a degree of utility, whence results for that thing an exchangeable value, or an increase of exchangeable value, equal or superior to the value of the labour employed. Labour is also productive when it results in a service which has exchangeable value, although this service is consumed at the same time that it

is rendered. It is unproductive when it results in no value. Productive labour is of three kinds—that of the man of science, of the manager of labourers, and that of the workman.”

He also combats Smith's doctrine of unproductive labour (*Cours.*, Part I, ch. v.)—"A house, a piece of plate, or massive furniture are very durable products; clothes are less so; vegetables, fruits, still less so. But yet this difference of durability does not in any way affect their quality of products; all of them are wealth in proportion to their value. A farmer in the valley of Montmorency draws annually, by the sale of his cherries, a sum as real as the proprietor of a portion of the forest of Montmorency draws from cutting wood. It is only the amount of the whole which makes the difference; and if the cherries produced are of more value than the wood, the cherries represent the greater production of wealth. Nevertheless, between the instant when these cherries are ripe, and when they must be eaten, there is no great interval; while the wood, which serves to form solid buildings, is wealth which lasts a long time. In reference to production, the amount of utility produced can only be determined by the price which men set on it. It is the price which measures the profit which the producer draws from it.

"Since, in regard to production, the durability of a product is of no consequence, provided it has value, let us come from products to products—from those which are necessarily consumed a few instants after they are completely created, to those which are necessarily consumed at the very instant of their creation; and we see that a theatrical performance, for instance, is a product which may differ from some fruit of the earth by its duration, because its value cannot last beyond the instant of representation, but which do not differ in the conditions which make them each a product; I mean the property of satisfying one of our wants, of gratifying a taste, of capacity of being valued and sold. The actors meet to offer you the result of their labours and talents; the spectators, on their side, meet to give in exchange for this agreeable product a sum which comes itself from the productions in which you or your parents have taken part. It is an exchange, like any other. Adam Smith and other Economists have denied to immaterial products the name of products, and to the labour of which they are the fruit the name of productive labour, upon the ground that these products are consumed at once, and have no durability, that they are not susceptible of accumulation, and therefore can never increase the capital of the nation.

“The last reason is founded upon an error. Do we accumulate the products which are not preserved, such as the fruits of the earth, which they do not deny to be products?

“In short, is a value the less a product because it is consumed? Are not the greater part of the products of the year destroyed within the year? Are we to say of a man who has lived upon his revenue that he has no revenue because nothing remains to him?

“Smith’s doctrine upon this point does not comprehend the whole doctrine of production. He places in the class of unproductive labourers, and regards as burdens on society, a crowd of men who, in truth, furnish a real utility in exchange for their pay. The soldier who holds himself in readiness to repel an invasion of the foreigner, and who repels it at the peril of his life; the administrator who devotes his time and his knowledge to the preservation of the rights of society; the upright judge—the protector of innocence and justice; the professor who diffuses the sciences painfully acquired; a hundred other professions which comprise persons the most eminent in dignity, the most eligible by their talents and personal character, are not less useful to society, and satisfy the wants which the nation as imperatively requires, as persons do clothing and shelter.

“If any of these services so rendered are not offered to sufficiently extensive competition; if they are paid for above their value, it is an abuse with which we have no concern here. Undoubtedly there is unproductive labour, but that to which a price is freely given, and which is worth the price put upon it when it may be refused, is productive labour, however short is the duration of the product.

“According to the writers who refuse to recognise immaterial products, the artificers who produce the fireworks which are to be let off next day in a public garden, are productive labourers, while the actors who prepare the performance of a grand tragedy are unproductive labourers. Certainly if we could judge by the wealth produced and consumed on these two occasions, otherwise than by the price agreed to be paid for them, we should think that the actors who prepared the theatrical performance, from the talent required, from the duration of the performance, from the long remembrance one preserves of it, from the delicacy and the elevation of the sentiments it gives rise to—we should say that these actors are more productive labourers than the artificers who prepare the squibs and crackers and wheels, which vanish in smoke.”

These observations of J. B. Say are both sound philosophy and

good common sense, and we should have expected that Mill, who was, in a general way, a disciple of Say's, and who begins his book by saying that wealth is everything which has a power of purchasing, which evidently includes services, would have assented to this argument of Say's. But he has reverted very much to Smith's doctrine, though he has extended it somewhat. After giving the general definition of wealth, that it is anything which is exchangeable, he has (Bk. I. ch. iii. § 3) narrowed it down to material products, and says — "I shall therefore, in this treatise, when speaking of wealth, understand by it only what is called material wealth, and by productive labour only those kinds of exertion which produce utilities embodied in material objects. But in limiting myself to this sense of the word, I mean to avail myself of the full extent of that restricted acceptation, and I shall not refuse the appellation productive to labour which yields no material product as its direct result, provided that an increase of material products is its ultimate consequence. Thus, labour expended in the acquisition of manufacturing skill I class as productive, not in virtue of the skill itself, but of the manufactured products created by the skill, and to the creation of which the labour of learning the trade is essentially conducive. The labour of officers of government in affording the protection which, afforded in some manner or another, is indispensable to the prosperity of industry, must be classed as productive even of material wealth, because without it material growth in anything like its present abundance could not exist. Such labour may be said to be productive indirectly, or mediately, in opposition to the labour of the ploughman and the cotton-spinner, which is productive immediately. They are all alike in this, that they leave the community richer in material products than they found it: they increase, or tend to increase, material wealth.

"By Unproductive Labour, on the contrary, will be understood labour which does not terminate in material wealth, which, however largely or successfully practised, does not render the community and the world at large richer in material products, but poorer by all that is consumed by the labourers while so employed.

"All labour is, in the language of Political Economy (Mill?), unproductive which ends in immediate enjoyment, without any increase of the accumulated stock of permanent means of enjoyment. And all labour, according to our present definition, must be classed as unproductive which terminates in a permanent benefit, however important, provided that an increase of material products

forms no part of that benefit. The labour of saving a friend's life is not productive, unless the friend is a productive labourer, and produces more than he consumes. To a religious person, the saving of a soul must appear a far more important service than the saving of a life; but he will not therefore call a missionary or a clergyman productive labourers, unless they teach, as the South Sea Missionaries have in some cases done, the arts of civilisation in addition to the doctrines of their religion. It is, on the contrary, evident that the greater number of missionaries or clergymen a nation maintains, the less it has to expend on other things; while the more it expends judiciously in keeping agriculturists and manufacturers at work, the more it will have for every other purpose. By the former it diminishes, *cæteris paribus*, its stock of material products, by the latter it increases them.

“Unproductive may be as useful as productive labour; it may be more useful even in point of permanent advantage, or its use may consist only in pleasurable sensation which, when gone, leaves no trace; or it may not afford even this, but may be absolute waste. In any case society, or mankind, grow no richer by it, but poorer. All material products consumed by any one while he produces nothing, are so much subtracted, for the time, from the material products which society would otherwise have possessed. But though society grows no richer by unproductive labour, the individual may. An unproductive labourer may receive for his labour, from those who derive pleasure or benefit from it, remuneration which may be to him a considerable source of wealth, but his gain is balanced by their loss; they may have received a full equivalent for their expenditure, but they are so much poorer for it. When a tailor makes a coat and sells it, there is a transfer of the price from the customer to the tailor, and a coat besides, which did not previously exist; but what is gained by an actor is a mere transfer from the spectator's funds to his, leaving no article of wealth for the spectator's indemnification. Thus the community collectively gains nothing by the actor's labour, and it loses of his receipts all that portion which he consumes, retaining only that which he lays by. A community, however, may add to its wealth by unproductive labour, at the expense of other communities, as an individual may at the expense of other individuals. The gains of Italian Opera singers, German governesses, French ballet dancers, &c., are a source of wealth, as far as they go, to their respective countries, if they return thither. The petty states of Greece, especially the ruder and most backward of these states, were nurseries of soldiers,

who hired themselves to the princes and satraps of the East to carry on useless and destructive wars, and returned, with their savings, to pass their declining years in their own country; these were unproductive labourers, and the pay they received, together with the plunder they took, was an outlay without return to the countries which furnished it, but, though no gain to the world, it was a gain to Greece. At a later period, the same country and its colonies supplied the Roman Empire with another class of adventurers, who, under the name of philosophers, or rhetoricians, taught to the youth of the higher classes what were esteemed the most valuable accomplishments; these were mainly unproductive labourers, but their ample recompense was a source of wealth to their own country. In none of these cases was there any accession of wealth to the world. The services of the labourers, if useful, were obtained at a sacrifice to the world of a portion of material wealth; if useless, all that these labourers consumed was, to the world, waste."

We have given this long extract in order to place before our readers fairly Mill's views on this important subject, which Malthus says justly goes to the root of the whole science, and as Mill says, brings us back to the discussion of what wealth is. For Productive Labour is Labour Productive of wealth. We see that Mill has somewhat extended the term beyond Smith's view of it, for while Smith only allows those to be productive labourers who are directly employed in the production of material products, Mill includes also those who are indirectly employed that way, and this, of course, is a considerably wider circle of persons. He admits "officers of the government" to be productive labourers. Hence, managers of manufactories, foremen, the army, navy, and police, are gathered within the fold of productive labourers; but we are not sure whether the judicial *corps* rank as "officers of the government." We are inclined to think they do, and in that case a barrister who earns an income by serving private persons would be an unproductive labourer, but a judge who earns an income by serving the State is a productive labourer. Authors and editors of newspapers take rank as productive labourers, while actors, singers, opera dancers, clergymen, and others, still remain out in the cold as unproductive labourers. Bankers may rank as productive labourers, because the operations of banking do undoubtedly cause a very great increase of material products. The labour of railway and other *employés* engaged in transporting merchandise would be productive, but in transporting passengers would be unproductive.

According to the distinction made by Mill, the labour of instructors teaching artizans and other productive labourers is productive ; the labour of those engaged in educating gentlemen, or persons not engaged in business, is unproductive. So the labour of a physician or surgeon healing a productive labourer is productive ; healing a gentleman is unproductive. According to Mill, the delight the audience receives from witnessing the performance of a Garrick, a Kemble, a Siddons, a Talma, a Macready, a Wigan, a Taglioni, a Fanny Elslar, a Lablache, a Catalani, a Malibran, a Jenny Lind, a Grisi, a Mario, an Albani, a Titiens, a Patti, or a Nilsson, is the result of unproductive labour, and the world is poorer by their maintenance, while the opulence of the world would be augmented by the labour of as many pastry-cooks.

To shew the extraordinary consequences of Mill's doctrine, we may take this case. Suppose the head-master of a great public school has a class of twenty pupils. Suppose that ten of these are the sons of noblemen and gentlemen of great estate, who will not be bound to work for their living ; suppose the other ten to be boys of a poorer class, who are intended for industrial occupations, such as lawyers, doctors, engineers, or other kinds of business. The head-master bestows equal care and labour in teaching each set of boys, and is paid exactly at the same rate for each set. According to Mill, his labour in teaching the rich boys is unproductive, and his labour in teaching the poorer boys is productive.

We do not think that such distinctions as these accord with general usage, and sound practical philosophy, and on this point we entirely agree with Say, that productive labour is labour which is productive of profit. When a person bestows his labour in preparing some material substance, or in rendering some service which he hopes will be required and demanded by others, what does he expect, and what is his object ? It is to draw forth or produce some reward in exchange for it. In general language, productive labour is labour productive of profit. Every one considers his labour as productive, not according to what he offers, but according to what he obtains in return for it. A theatrical company may *produce* several pieces during the season, but whether their labour is *productive* or not, depends entirely upon the returns to their treasury. If they play to empty benches, their labour is unproductive ; if the house is crowded, and their treasury well filled, their labour is productive.

And it can easily be shown, from Mill's own words, that this is the true meaning, because he says that productive labour is labour

productive of wealth. And what is wealth by his own definition? It is *anything* which has a *power of purchasing*. Whether, therefore, anything is wealth or not, purely depends whether anything can be obtained in exchange for it. And of course, the more that can be obtained in exchange for it, the greater wealth it is, and the more productive. Hence, by Mill's own definition, whether anything is productive or not, does not depend on the nature of the thing itself, but upon the quantity of other things it can draw forth in exchange for it, or the amount of the returns. If a man can earn a large income by acting, or singing, or any other service which perishes at the instant it is performed, his labour is just as much productive as if he obtained the same returns by selling material goods.

Sir Walter Scott protests with manly good sense against the doctrine of Adam Smith, that authors are not productive labourers.

J. H. Burton says truly :—"Whatsoever society pays for, and ought to pay for, may fairly be considered as productive labour for our present purpose."

Hence, in accordance with general usage, and these extracts from Say and Burton, we shall always use the term productive labour to mean labour which earns a profit or reward. A productive labourer is any labourer who earns an income, no matter whether that labour terminates in a material product or not; and an unproductive labourer is one who labours without a reward or profit. And anything whatever which earns a profit is, as Senior says all Economists are agreed in, Capital.

PROFIT.

The word Profit comes from the Latin *proficere*, to make progress. As the Chorus says in Marlowe's *Faustus*,

"So soon he *Profits* in divinity,"

that is, makes progress.

The object and intent of every commercial operation is to make a profit. As George Herbert says—

"The merchant that gains not, loses."

The expense of placing any object in the market is termed the Cost of Production; and the hope and intention is that the selling price, or Value should exceed the Cost of Production.

Profit is the Difference between the Cost of Production of any commodity and its Price, or Value.

This difference may be in excess of the Cost of Production; and

then the Profit is Positive, and is termed a **Gain**; but it may be in defect of the Cost of Production, and the Profit is Negative, and is termed a *Loss*.

Profit is estimated by the Ratio between the Difference and the Cost of Production. Thus if the Cost of Production be £100, and the Profit £10, it is termed a Profit of 10 per cent.

Profit is a general name for the difference between Cost of Production and Value; whether the matter traded with be Merchandise of any sort, or Money, or Credit.

There are two grand divisions of commerce: the Commerce in Merchandise, and the Commerce in Money, or Debts.

Profits made in the Commerce of goods are termed **Profits**; Profits made in the Commerce of Money, or Credit, are termed **Interest**, or **Discount**.

Definition of Rate of Profit.

When we speak of the **Rate** of anything it invariably means the Time in which it is done. If any one speaks of the Rate at which a horse can gallop, or the Rate at which an athlete can run, or the Rate at which a ship can steam, it always refers to the Time in which the distance is accomplished. To say that a horse can gallop at the Rate of 30 miles, or that an athlete can run at the Rate of 14 miles, or that a ship can steam at the Rate of 25 knots, is evidently a defective form of expression, which conveys no definite meaning whatever. The Rate of speed in such cases is usually referred to the hour.

So in speaking of the **Rate of Interest**, some time—usually the year—is always expressed. Thus the Rate of Interest is always said to be so much per cent. and *per annum*.

Evidently, therefore, the term Rate of Profit must mean the amount of Profit made in some certain Time, such as the year. Hence by analogy, and to compare Rate of Profit with Rate of Interest, we must speak of the Rate of Profit as so much per cent. and *per annum*.

Error of Economists in their Definition of Rate of Profit.

Economists, however, have committed an extraordinary oversight in their definition of Rate of Profit; they entirely omit the element of Time; and define Rate of Profit to be merely the ratio of the Profit to the Capital.

Without giving any clear definition of Rate of Profit, both Smith and Ricardo never perceived that a Profit made in a day is a very different Rate of Profit from the same Profit made in a year!

But this error appears clearly in subsequent writers. Thus MacCulloch says—

“The Rate of Profit is the proportion which the amount of Profit derived from an undertaking bears to the Capital employed in it.

“It is obvious that the Rate of Profit may be raised in three, but only in three ways.

1. By Industry becoming more productive.
2. By a reduction in the rate of wages.
3. By a reduction in the amount of taxation.

“And it may be reduced by the opposite circumstances.

1. By Industry becoming less productive.
2. By a rise in the rate of wages.
3. By a rise in the amount of taxation.

“Profits cannot be affected in any way not referable to one or other of these heads.”

So Malthus says—

“*Profit of Stock.*—When Stock is employed as Capital in the Production and Distribution of Wealth, its Profits consist of the Difference between the Value of the Capital advanced and the Value of the Commodity when sold or used.

“*The Rate of Profit.*—The percentage proportion which the Value of the Profits upon any Capital bears to the Value of such Capital.”

Again—“The Profits of Capital consist of the difference between the Value of a Commodity produced, and the Value of the Advances necessary to produce it; and these advances consist of accumulations generally made up of wages, rent, taxes, interest, and Profits.

“The Rate of Profit is the proportion which the difference between the Value of the Commodity produced, and the Value of the Advances necessary to produce it, bears to the Value of the advances. When the Value of the product is great compared with the Value of the advances, the excess being considerable, the Rate of Profit will be high. When the Value of the product exceeds but little the Value of the advances, the difference being small, the Rate of Profit will be low.

“The varying Rates of Profit, therefore, obviously depend upon the causes which alter the proportion between the Value and the

advances necessary to production, and the Value of the product obtained."

Lastly, Mill says—"The Profits of Stock are the surplus which remains to the Capitalist after replacing his Capital; and the Ratio which the surplus bears to the Capital itself, is the Rate of Profit."

"The Rate of Profit is the proportion which the Profit bears to the Capital In short, if we compare the *price paid* for labour and tools with what that labour and those tools will produce, from this Ratio we may calculate the Rate of Profit."

"Profits, then (meaning not gross profits, but the Rate of Profit), depend (not upon the price of labour, tools, and material, but) upon the Ratio between the price of labour, tools, and material, and the produce of them."

"The whole of the surplus, after replacing wages, is Profits. From this it seems to follow that the Ratio between the wages of labour, and the produce of labour, gives the Rate of Profit. And then we arrive at Ricardo's principle, that Profits depend upon wages; rising as wages fall, and falling as wages rise."

"This theory we conceive to be the basis of the true theory of Profits. It is, therefore, strictly true that the Rate of Profit varies inversely, as the Cost of Production of wages. Profits cannot rise unless the Cost of Production of wages falls exactly as much; nor fall unless it rises."

"The variation, therefore, in the Rate of Profits and those in the Cost of Production in wages, go hand in hand, and are inseparable. Mr. Ricardo's principle, that Profits cannot rise unless wages fall, is strictly true."

"The only expression of the law of Profit which seems to be correct is, that they depend upon the Cost of the Production of wages. This must be received as the ultimate principle. . . ."

"The Rate of Profit, therefore, tends to *fall* from the following causes:

"1. An increase of Capital beyond population, producing increased competition for labour."

"2. An increase of population, occasioning a demand for an increased quantity of food, which must be produced at a greater cost."

"The Rate of Profit tends to *rise* from the following causes:

"1. An increase of population beyond Capital, producing increased competition for employment."

"2. Improvements producing increased cheapness of necessities, and other articles habitually consumed by the labourer."

And he further says—"The Capitalist, then, may be assumed to make all the advances and receive all the produce. His Profit consists of the excess of the produce above the advances ; his Rate of Profit is the Ratio which that excess bears to the amount advanced.

"It thus appears that the two elements on which, and on which alone, the gains of the Capitalist depend, are first, the magnitude of the produce ; in other words, the productive power of labour ; and secondly, the proportion of that produce obtained by the labourers themselves ; the Ratio which the remuneration of the labourers bears to the amount they produce. These two things form the data for determining the gross amount divided as Profit among all the Capitalists of the country ; but the Rate of Profit, the percentage on the Capital, &c.

"We thus arrive at the conclusion of Ricardo and others, that the Rate of Profit depends upon wages ; rising as wages fall, and falling as wages rise.

"The cost of labour, then, is in the language of mathematics, a function of three variables : the efficiency of labour, the wages of labour (meaning thereby the real reward of the labourer), and the greater or less cost at which the articles composing that real reward can be produced or procured. It is plain that the cost of labour to the Capitalist must be influenced by each of these three circumstances, and *by no others*. These, therefore, are also the circumstances which determine the Rate of Profit, and it cannot be in any way affected except through one or other of them."

Thus all these writers, men of distinct ability, consider that the **Actual Profit** is the same thing as the **Rate of Profit** ; a most palpable arithmetical blunder, which leads to most erroneous consequences, we shall show.

Erroneous Doctrines deduced from the erroneous Definition of Rate of Profit.

We have laid these long extracts before the reader in order that he may see that what we said is true. The oversight is so manifest that it is strange that men of ability like Ricardo, MacCulloch, Malthus, and Mill should have made it. It is a fact that no Economist has seen that **Time** is a necessary element in the definition of **Rate of Profit**.

There is not a single Economist who has seen that a Profit of 5 per cent. made in a day is a different Rate of Profit from a Profit of 5 per cent. made in a week, a month, or a year !

It would be just as absurd to say that a sum of 5 per cent. paid as Interest is the same Rate of Interest, whether it is paid for a loan of money for a day, a week, a month, or a year !

And this palpable arithmetical blunder has necessarily and logically led to consequences of the deepest practical importance. For Ricardo and his copyists assert that Profits can only be increased by a reduction of wages, and can only be reduced by an increase of wages.

Ricardo says that the Value of Commodities is divided into two portions, one the profits of stock, and the other the wages of labour, consequently he asserts that "*nothing can affect profits but a rise in wages . . . profits depend on high or low wages.*"

From these doctrines they drew the necessary conclusion that the interests of Capitalists and Workmen are always antagonistic to each other, and that the gain of one must necessarily be the loss of the other.

It was apparently this hopeless doctrine of Ricardo's, along with a similar error regarding Rent, and the absurd doctrines of Malthus on Population, which are also founded on a palpable arithmetical error, which seemed to show that society must necessarily deteriorate with the increase of numbers, that led a caustic philosopher of recent times to nickname Economics as the "dismal science."

Correction of these Erroneous Doctrines.

But a very few sentences will dissipate these gloomy ideas, and a very simple arithmetical calculation will show that Profits and Wages may very easily rise together, and that consequently there is no such necessary antagonism between the interests of Capitalists and Workmen as these Economists allege.

Suppose that the Capital advanced is £100, and the Profit is £20.

Then if the Profit is made in a *Year*, the Rate of Profit is evidently 20 per cent. *per annum*.

If the Profit is made in a *Month*, the rate of Profit is evidently 240 per cent. and *per annum*.

If the Profit is made in a *Week*, the Rate of Profit is evidently 1,040 per cent. and *per annum*.

If the Profit is made in a *Day*, the Rate of Profit is evidently 7,300 per cent. and *per annum*.

These principles are so clear as to be beyond dispute, and we can test the doctrines of these writers by them. They repeatedly assert

that the Rate of Profit can by no possibility be increased except by a diminution of wages.

But the simplest arithmetical calculation shows that, supposing the Capital and the actual Profits to remain exactly the same, the Rate of Profit may be enormously increased by the accelerated rapidity with which Profits are made.

And similarly, if the Capital and the actual Profits remain the same, the Rate of Profit may be immensely diminished by a retardation of the periods in which they are made.

So also it is quite easy to show that Wages may be increased, and the actual Profit diminished, and yet the Rate of Profit greatly increased.

Suppose, as before, the Capital is £100, and the Profit £20 made in a year.

Suppose that the period of making the Profit is reduced to a month, then the Rate of Profit is 240 per cent. *per annum*.

Suppose that, in consequence of making the greater Rate of Profit, the Capitalist advances Wages £5. Then Cost of Production is £105, and the Profit is £15, made in a month, or nearly 14·3 per cent. per month, which is Profit at the Rate of more than 167 per cent. and *per annum*.

Suppose a still more accelerated sale, and that the trader makes the Profit of £20 in one day: then, as we have seen above, that is a Profit at the Rate of 7,300 per cent. and *per annum*.

Suppose that in consequence of this greatly increased Rate of Profit, the trader advances wages to £110. Then, with an outlay of £110, he makes a Profit of £10 in one day: being more than 9 per cent. per day: or at the Rate of more than 3,318 per cent. and *per annum*.

Hence, while Price remains exactly the same, Wages may be considerably, and Rate of Profit may be enormously, increased by the simple acceleration of the periods of return.

These cases may, of course, be reversed. The Price may remain the same, the wages diminished, the actual Profits increased, and yet the Rate of Profit enormously diminished by the simple retardation of the periods of sale.

So also the Price may be reduced, and wages increased, and therefore the actual Profit reduced both by an increase of wages and a reduction of Price, and yet the Rate of Profit greatly increased.

Suppose that in the last case the trader, in consequence of competition or for any other reason, reduces prices by £5, so that

as before, wages came to £110: then actual profits are £5: this would still be Profit at the rate of 4.545 per cent. per day, or more than 1,659 per cent. *per annum*.

Thus it is clearly proved that by the simple acceleration of rapidity of sale, Price may be reduced, wages may be increased, actual Profit reduced; and yet the Rate of Profit increased: that is, the Capitalist, the Workman, and the Customer may all gain together: and of course, *è converso*, they may all lose together by the reverse process of retarding the periods of return.

There may therefore very well be, and in most cases there is, a solidarity of interests between Customer, Capitalist, and Workman: and not a necessary antagonism, according to the doctrine of Ricardo and his copyists. The evident error of these writers arises from their having entirely omitted the most potent method of increasing the Rate of Profit: namely, accelerating the periods of return.

The current doctrine of Economists is that Rate of Profit varies directly as the excess of the Profit above the Cost of Production: whereas the true doctrine is—

Rate of Profit varies Directly as the excess of the Profit above the Cost of Production, and Inversely as the Time in which it is made.

Economists have adopted this manifest error from the usage of traders. When a banker charges his customer Interest, or Discount, or an advance, the Rate per cent. and *per annum* is agreed upon, and the customer pays a sum according to the *Time* of the advance. But when a trader buys goods from a wholesale dealer, he simply adds on to the goods a percentage on the wholesale price, and makes no difference whether he sells the next day, the next week, the next month, or the next year: and he erroneously calls that the Rate of Profit: thus throwing great obscurity and misconception over the whole subject. But certainly professed writers on Economics ought to have perceived this error and rectified it.

Examples of Trading Profits.

To show how an apparently very moderate actual Profit may be a high Rate of Profit, we may take two simple examples.

A retail bookseller is entitled, by the custom of trade, to a reduction of 25 per cent. off the published price of the work. Many retail booksellers offer to obtain any book for their customers at a discount of 20 per cent. off the published price. Suppose the book

is ordered one day and paid for the next. The customer is pleased at getting the book so cheap, and no one grudges the bookseller his apparently very modest profit of 5 per cent.

Let us now see what the Rate of Profit is. By such an operation he gains a Profit of 5 per cent. on three-fourths of the price of the book in one day: which is an actual Profit of 6.666 per cent. *per day*: which is at the rate of more than 2,433 per cent. and *per annum*. Traders complain when bankers charge 6 per cent. *per annum*: what would they say if a banker charged them 6 per cent. *per day*?

A costermonger buys baskets of strawberries in Covent Garden market at 2½d., and sells them the same afternoon at 3d.: every one would say that that is a very moderate Profit. Yet it is a Profit of one-eleventh part, or more than 9 per cent. *per day*: which is a Rate of Profit of more than 3,300 per cent. *per annum*.

It would be too long here to exhibit all the confusion and misapprehension in Economics caused by this patently erroneous definition of Rate of Profit by Economists. We may refer to the chapter on Profits in our *Elements of Economics*. It is sufficient to say that the rectification of this arithmetical definition of Rate of Profit has brought down whole masses of Economic dogma, just as a barrel of dynamite would bring down the Monument.

PROMISSORY NOTE.

A Promissory Note is one form of Incorporeal Property; it is a *Jus in personam*.

An unconditional written **Promise** made by a person to pay absolutely, and at all events, (1) a certain sum of Money (2) to a certain person (3) at a certain event, is, in modern language, termed a **Promissory Note**, or shortly a **Note**.

The following is the usual form of a Promissory Note:

“£125 6s. 8d.

London, May 4th, 1896.

“Three months after date I promise to pay John Jones, or order, the sum of one hundred and twenty-five pounds, six shillings, and eightpence.

“William Johnson.”

A Promissory Note is one form of Credit. All Notes are part of the Circulating Medium or Currency. They are termed in law *Valuable Securities*.

PROPERTY.

It is now recognised that there are three orders of Economic, or Exchangeable, Quantities, or Wealth : (1) Material things of all kinds : (2) Personal Qualities in the forms of (a) and (b) Credit : and (3) Abstract Rights of a great variety of kinds. All these things are capable of having their Value measured in Money, or possess the Quality of Exchangeability : they may be bought and sold, or exchanged : and therefore they must all, by the Laws of Natural Philosophy, be included under the term Wealth.

The next thing to be done is to find a General Term which will include them all : and this general term is found in the term **Property**. And when we understand the true and original meaning of the word Property, it will throw a blaze of light over the whole science of Economics, and clear up all the difficulties which the word Wealth has given rise to. The true meaning of the word Property is the key to the whole Sciences of Jurisprudence and Economics.

Most persons when they hear the word Property, think of some material things, such as lands, houses, cattle, corn, money, &c. But this is not the true and original meaning of the word Property.

Property in its true and original meaning is not any Thing at all material or otherwise : but it is the Ownership, or Absolute Right to something.

Savages have very feeble notions of Abstract Rights. Their ideas of Wealth are something they can lay hold of : something which they can only acquire by violence, and which they can only retain by bodily force. They have no ideas of Abstract Rights separated from anything material.

So in archaic jurisprudence a person's possessions were called *Mancipium* : because they were supposed to be acquired by the strong hand : and if not held with a very firm grasp, they would probably be lost. But as civilisation progressed, and firm government succeeded barbarism, men's ideas were transferred from the actual material things to the Rights to them. Thus in course of time the word *Mancipium*, which originally meant the material things which were held by the hand, came to mean the Absolute Right to them : and in early Roman Law *Mancipium* came to mean Absolute Ownership.

Thus Lucretius (*De Rerum Naturâ*, iii. 971) says—

“Vitaque Mancipio nulli datur, omnibus usu.”

“*And Life is given in absolute Ownership to none, but only as a Loan to all.*”

In process of time Property came to be denoted by a word which meant a pure Abstract Right.

All the possessions of the family belonged to the family as a whole (*Domus*). But the head of the house (*Dominus*, δεσπότης) alone exercised all Rights over them. He alone had the absolute ownership of his *familia*, or household, including his wife, children, slaves, and all its possessions. Hence this right was called *Dominium*, δεσποτεία, and *Dominium* was always used in Roman law to denote absolute Ownership.

So long as the *Patria Potestas* retained its pristine rigour, no member of the family could have any individual Rights to things. But in the time of the early Emperors this extreme rigour of the *patria potestas* began to be relaxed. In some cases individual members of the family were allowed to have Rights to possessions, independently of the head of the house and its other members; and this Right was termed **Proprietas**.

This Right of holding possessions independently of the other members of the family was considerably extended by subsequent Emperors, and was always called *Proprietas*.

Proprietas, therefore, in Roman Law meant the absolute and exclusive Right which a person had to anything, independently of any one else, and was synonymous with *Dominium*. Neratius, a jurist of the time of Hadrian, says, “*Proprietas id est Dominium*” —“*Property that is Ownership.*”

So Gaius says, “*Non solum autem Proprietas per eos quos in potestate habemus acquiritur nobis.*”

“*Not only then do we acquire absolute Property through those whom we have in our power.*”

So also Justinian, “*Transfert Proprietatem rerum.*”

“*Transfers the Property in the goods.*”

And in other instances too numerous to cite.

Thus the word *Proprietas* in Roman Law never meant a material thing, it invariably meant the exclusive and absolute Right to something; the thing itself was *Materia*.

Meaning of the word Property in English.

So also in early English the word Property invariably meant a **Right**, and not a **Thing**.

Thus grand old Wycliffe says, “They will have Property in ghostly goods where no Property may be, and have no Property in worldly goods where Christian men may have Property.”

So Bacon invariably uses the word Property to mean a Right, and never a Thing. He says one of the uses of the Law "is to dispose of the Property of their goods and chattels." He explains the various methods by which Property in goods and chattels may be acquired. So he speaks of the "Property, or Interest, in a timber tree."

In Comyns's great Digest of the Law there is not a single instance of the word Property being applied to material things. He invariably uses it to mean **Absolute Ownership**.

Thus up to the middle of the last century Property was invariably used to mean Absolute Ownership, and was never applied, at least in any work of authority, to material substances.

Every Jurist knows that the true meaning of Property is a Right, and not a Thing. Thus Erskine says, "The sovereign, or real, Right is that of Property, which is the Right of using and disposing a subject as our own, except so far as we are restrained by law or paction."

This meaning of Property has been understood by Economists as well as by Jurists. Thus Mercière de la Rivière, one of the most eminent of the French Economists, says, "Property is nothing but the Right to enjoy. . . . It is seen that there is but one Right of property, that is a Right in a person, but which changes its name according to the nature of the object to which it is applied."

The word Property is in no way restricted to the Rights to material substances ; it is also applied to the Rights to abstract Rights.

Thus landed Property means Rights to lands and houses ; Real Property means Rights to realty : Personal Property means rights to Personal chattels.

Funded Property is the Right to demand a series of payments from the nation ; Literary Property is the Right to profits from works of literature ; Artistic Property is the Right to profits from works of art ; Dramatic Property is the Right to receive profits from dramatic representations ; Newspaper Property is the Right to the profits from publishing a newspaper. So there are many other kinds of Incorporeal Property, such as Shares in Commercial Companies, the Goodwill of a business, a professional Practice, Patents, Tithes, Advowsons, Shootings, Fishings, Market Rights, and many other kinds of Valuable Rights.

So when a person has sold goods on credit he acquires a Right of action, or Credit, or a Debt, in exchange for them, and he has a Property in this Right of action, Credit, or Debt, and can sell it like any material chattel.

So a person has the Property in his own character, his industrial

and mercantile capacity. Smith says that a man's Labour is his most sacred Property. So to a banker, a merchant, or a trader, his Credit is his most sacred Property.

This appears more clearly in the law of Scotland, in which lands and houses, which are termed Real Property in the law of England, are termed Heritable Rights, because the Rights to them pass to the heir. And what is termed Personal Property in the law of England is termed Movable Rights, because the Rights to them pass or move to the executor; and under the term Movable Rights, Rights of action, Credits, or Debts are included. Hence, Abstract Rights are the subjects of Property exactly in the same way as material chattels.

When the Socialists and Communists wish to destroy Property, it is not the material things they wish to destroy, but the exclusive Rights which private persons have in them.

There is besides a whole class of Latin words, which, like *Mancipium*, in early times and in classical Latin meant material things, but which in the progress of civilisation and jurisprudence, and in modern mercantile Law, have come to mean mere Abstract Rights and Duties; and by a reverse process most unfortunately many words, which, like Property, really mean Abstract Rights, have been perverted to mean material things—to the great confusion of Jurisprudence and Economics.

The word Property means Absolute, Entire, and Exclusive Ownership. It is the Right to deal with the objects—Material, Immaterial, and Incorporeal—in any way in which the owner pleases, except in so far as he is restrained by law or paction.

The term Property comprehends—

1. The **Jus Possidendi**, or the Right of Possession of the object.
2. The **Jus Utendi**, or the Right of using it in any way the owner pleases.
3. The **Jus Fruendi**, or the Right of appropriating any fruits or profits from it.
4. The **Jus Abutendi**, or the Right of destroying or alienating it.
5. The **Jus Vindicandi**, or the Right of recovering it, if found in the wrongful possession of anyone.

Property, or Dominion, therefore, does not mean any single Right, but an aggregate, or bundle of Rights: it comprehends the Totality of Rights which can be exercised over anything.

Economic Quantities, then, or Economic Rights, are then of three distinct orders—

1. Rights, or Property, in some material thing which *has* already *been* acquired.

2. Rights, or Property, in labour or services.
3. Rights, or Property, in something, which is only *to be* acquired at some *future* time.

Now, we observe that the first and third of the Economic Quantities, or Rights, enumerated above are Inverse, or Opposite, to each other. Property, like Janus, has two faces, placed back to back. It regards the Past and the Future. We may buy and sell the Right to a thing which *has already been* acquired in time *past*; and we can also buy and sell the Right to a thing which is only *to be* acquired in time *future*.

It is one of the innumerable applications of the Algebraical Signs + and -, that if any point in time be taken as 0, then Time *before* this epoch and Time *after* this epoch are denoted by the opposite signs + and -; which sign to denote either Time being a matter of pure convention.

Let us denote Time present by 0; Time past by +; and Time future by -.

It will be represented thus—

&c., + 5, + 4, + 3, + 2, + 1, 0, - 1, - 2, - 3 - 4 - 5 - &c., and it is evident that the Totality of Time from any year preceding the given era 0 to any year subsequent to the given era will be the sum of the Positive years and the Negative years.

Thus, if we take the Christian era as 0, years before it as Positive, and years after it as Negative, then the total period from the foundation of Rome to the present time is + 753 years, together with - 1895 years; or 2,648 years in all.

Hence the products which have already been acquired in the Past, or Positive years, may be termed Positive Products; and the products which are to be acquired in the Future, or Negative years, may be termed Negative Products.

Now in all mathematical and physical sciences, it is invariably the custom to denote similar quantities, but of opposite qualities, by the opposite signs + and -.

Hence as a matter of simple convenience, and following the invariable custom in all mathematical and physical sciences, if we denote Property in a product which *has already been* acquired as **Positive**, we may, as a mark of distinction, denote Property in a product which is only *to be* acquired in time Future as **Negative**.

Now Property in a thing, which has already come into existence, is Corporeal or Material Property; and as we have assumed above time past as positive, Corporeal or Material Property may be termed

a Positive Economic Quantity ; and Property in a thing to be acquired at some future time is Incorporeal Property ; and as we have above denoted time future as negative, Incorporeal Property may be aptly designated as a Negative Economic Quantity.

And as in all mathematical and physical sciences, the whole science comprehends both Positive Quantities and Negative Quantities ; so the whole Science of Economics comprehends both Positive Economic Quantities and Negative Economic Quantities : both Corporeal Property and Incorporeal Property.

By this means we double the field of Economics as usually treated ; and we do in Economics what these have done in the various mathematical and physical sciences, who introduced and made Negative Quantities an integral part of them.

By this means we are enabled to obtain the solution of problems which have hitherto baffled all Economists, and it is by this means only that the Theory of Credit can be explained.

Conspectus of the Totality of Property.

As Labour and Services perish in the very act of being performed, we may denote Property in them as Property in the present.

The other two kinds of Property are of continuous endurance, and may be transferred any number of times, and we may denote them thus :—

PROPERTY CONSISTS OF		
PROPERTY IN THE PRODUCTS OF THE PAST	PRESENT TIME	PROPERTY IN THE PRODUCTS OF THE FUTURE
+	0	—
Lands, Houses, &c.		Annual Income for ever.
Money already earned by a Merchant.		His Credit.
Premises, Stock of Goods in a Shop.		The Goodwill.
Money already earned by a Professional Man.		The Practice.
The Capital of a Company.		The Shares.
		Annuities of all sorts: the Funds, Tolls, Ferries, Patents. Ground Rents, &c.

Now each kind of Property may be valued in money ; may be bought and sold or exchanged ; and is therefore Wealth, as declared 1300 years ago in Roman Law. By including both species of Property under the term Wealth, we double the field of Economics as usually treated, and give it the same extension as introducing Negative Quantities does in Mathematics and Natural Philosophy.

RENT.

The word **Rent** (*Reditus*) means any income or revenue derived from any source. It means an **Annuity**, or the Right to receive a series of payments.

Thus Chaucer, describing the well-to-do citizens of London, says—

“They had enough of Chattels and of **Rent**.”

So, in “The Monk’s Tale”—

“And seyde—‘King, God to thy fader sente
Glorie and honour, regne, tresour, **Rente**.”

Also—

“When as he with his owen hand slew thee,
Succeeding in thy regne, and in thy **Rente**.”

Sir David Lyndsay of the Mount says—

“Who fixed have their hearts and whole intents
On sensual lust, on dignity, and **Rents**.”

Formerly it was also applied to the interest paid for the use of money as a permanent loan. Thus, when Charles II. shut up the Exchequer, and confiscated the funds of the bankers lodged in it, he promised them a yearly **Rent** of 6 per cent.

So in Boswell’s “Johnson” it is said that a lady left Mrs. Williams an “annual **Rent**.”

The use of the word **Rent**, however, as applied to the interest paid for a loan of money has been discontinued in English. The only instance that we are aware of where it is used to denote persons who acquired Rights in return for a loan of Money are the **Renters** of Drury Lane and Covent Garden Theatres. They are persons and their assignees who subscribed to rebuild the Theatres after they were burnt down, and received in exchange certain Rights of admission to the performances.

The word, however, is still used in this sense on the Continent. The Funds are there still called **Rentes**, a fundholder is still called a **Rentier**. Turgot speaks of the *Interêt Foncier* and the *Interêt Rentier*, or the Landed Interest and the Moneyed Interest.

The word Rent in English is now usually restricted to the Right to receive compensation for the use of lands, houses, pews, telegraph wires, mint dies, copyrights, patents, and other property held for a period of time.

The subject of Rent has acquired an exaggerated notoriety in Economics, from a controversy on the Rent of land which arose from Smith's self-contradictions on Rent: in one set of passages Smith maintains that Rent is a cause of Price, *i.e.* that it raises the price of corn to the Consumer; in another set he alleges that Rent is the effect of Price, *i.e.* that it comes out of Price and, therefore, does not raise it.

The whole practical importance of the question is reduced to this—If the landlords were to forego their Rents, would corn be any the cheaper to the Consumer?

Smith says (Book i. ch. 6)—“In the price of corn, one part pays the rent of the landlord, another pays the wages or maintenance of the labourers and labouring cattle employed in producing it, and the third pays the profit of the farmer. These three parts seem either immediately or ultimately to make up the whole price of corn.”

Again—“Wages, Profit, and Rent are the three original sources of all revenue, as well as of all exchangeable value”!

Again—“As in a civilized country, there are but few commodities of which the exchangeable value rises from labour only, rent and profit contributing largely to that of the far greater part of them.”

In the next chapter he says that there is, in every society or neighbourhood, an ordinary or average rate of wages, profit, and also of rent; the latter regulated partly by the general circumstances of the society or neighbourhood in which the land is situated, and partly by the natural or improved fertility of the land.

“These ordinary or average rates may be called the natural rates of wages, profit, and rent, at the time and place at which they commonly prevail.

“When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing, and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price.

“The commodity is then sold precisely for what it is *worth* (!), or for what it really costs the person who brings it to market.”

[The worth of the commodity is what the producer can obtain in exchange for it.]

“The actual price at which any commodity is commonly sold is

called its market price. It may either be above, or below, or exactly the same with its natural price.

“The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity, or the whole value of the rent, labour, and profit which must be paid in order to bring it thither.”

Now these extracts affirm, as clearly as can be, that Rent, Wages, and Profit enter into the price of corn exactly in the same way, so that if one be a cause of high price, the others must be so too.

But in Bk. I. ch. ii., on the Rent of Land, Smith says, “Rent, it is to be observed, enters into the composition of the price of commodities in a different way from Wages and Profit. High or low wages and profit are the *causes* of high or low price; high or low rent is the *effect* of it. It is because high or low wages and profit must be paid in order to bring a particular commodity to market, that its price is high or low. But it is because its price is high or low, a great deal more, a very little more, or no more than what is sufficient to pay those wages and profit, that it affords a high rent or a low rent, or no rent at all.”

Now these doctrines of Smith, as to Rent, are manifestly self-contradictory. In the first set he manifestly makes Rent enter into price in the same way as Wages and Profits, and to be a cause of Price; in the second he makes Rent to enter into Price in the opposite way to Wages and Profit, and to be the *effect* of Price.

Smith's work was published in 1776, a few weeks before Hume died. The first night that Hume read it, the sagacious philosopher immediately detected Smith's error in alleging that the payment of Rent raised the price of corn, and wrote to tell him of it.

It was this manifest self-contradiction in Smith's doctrine of Rent that gave rise to the long contest on the Theory of Rent. It was commenced by a writer named Anderson, who was a practical farmer, and also an extensive writer on agricultural subjects. He has a title to be remembered by posterity as the inventor of the two-horse plough without wheels, to which the immense progress of Scottish agriculture is mainly due. In 1777 a new corn bill was brought into Parliament, and Anderson wrote a pamphlet called *An Inquiry into the Nature of the Corn Laws*, for the purpose of advocating a sliding bounty. In the course of this he shows the

entire fallacy of Smith's idea that the payment of rent influences the price of corn (*McLeod's Dictionary of Political Economy*, Art. Anderson). He shows that the price of corn entirely depends upon Supply and Demand, and that all the variations in price are caused by a change in the relation of supply and demand. He shows well that rents entirely depend on the price of corn, and that any rise in the price would only temporarily benefit the farmer, but ultimately it would go entirely to the landlord.

In a note at page 45 of this pamphlet he broaches his Theory of Rent, which is often supposed to be identical with Ricardo's Theory of Rent, but they are, as we shall show, radically different.

"It is not, however, the Rent of the land which determines the price of the produce, but it is the price of the produce which determines the Rent of the land."

He says that in every country there are a variety of soils, which may be supposed to proceed in regularly decreasing gradations of fertility; that the price of the produce is regulated solely by the Supply and the Demand, and that the price of corn indicates the waste soil upon which corn can be grown so as to pay its expenses. The possessors of the worst fields could only just afford to produce it at that price, but they could not afford to pay any Rent. Those who possessed more fertile lands would have a profit above that, and that profit would afford Rent.

Anderson then asks if the landlords were, from patriotism, to lower or forego their rents, would that reduce the price of corn? He shows that it would not, because the people require the produce of all the lands as before, and must pay the price necessary to induce the owner to cultivate them. The only consequence, therefore, of such a piece of Quixotism on the part of the landlords would be that the class of farmers would be enriched, without producing the smallest benefit to the consumers of grain.

Everyone with the least practical knowledge of agriculture will see that Anderson's reasoning is quite correct. It is the price of corn which indicates the worst soil on which corn can be grown: and as the required price must be paid in order to enable corn to be produced in sufficient quantities to satisfy the demand, it can make no difference to the Consumer whether the Price goes entirely to the farmer or is divided between the landlord and the farmer.

Anderson's reasoning, therefore, is correct on the supposition that there are different degrees of fertility in the lands of the country. But it would appear from such reasoning that differences of fertility in the soil were the necessary condition of Rent being paid; and

that if all the soil was of uniform fertility no such thing as Rent could be paid.

However, such a consequence as this is manifestly contrary to common sense, and consequently there must be a flaw in the reasoning.

On Ricardo's Theory of Rent.

Ricardo begins by defining Rent to be that portion of the produce of the earth which is paid to the landlord for the use of the *original and indestructible powers of the soil*.

This definition is purely arbitrary and futile: the earth has no *original and indestructible powers* in the sense Ricardo means. The only original and indestructible power that the land has is *extent*. There is scarcely any land whatever which is fit for cultivation without a very considerable expenditure of Labour and Capital: and the powers of the earth are so far from being indestructible that, except in a few favoured regions, they wear out very fast, and require a constant renewal of Labour and Capital to keep it in a fit state for cultivation.

He then says — “It is often, however, confounded with the Interest and Profit of Capital, and in popular language the term is applied to whatever is annually paid by a farmer to the landlord. If of two adjoining farms of the same extent, and of the same natural fertility, one had all the convenience of *farming buildings*, and, besides, was properly drained and manured, and advantageously divided by hedges, fences, and walls, while the other had none of these advantages, more remuneration would naturally be paid for the use of one than for the use of the other: yet in both cases this remuneration would be called Rent. But it is evident that a portion only of the money annually to be paid for the improved farm would be given for the original and indestructible powers of the soil: the other portion would be paid for the use of the Capital which had been employed in ameliorating the quality of the land, and in erecting such buildings as were necessary to secure and preserve the produce.”

With respect to this we may say that Rent is the word invariably applied to remuneration paid for the use of houses and buildings, and therefore nothing can be more proper than to include the sum paid for them in Rent. With respect to the other things which are necessary for the due cultivation of the farm, to deny the name of Rent to the remuneration paid for them is as frivolous as to say, speaking of a house, that the word Rent is to be restricted to the

sum paid for the use of the bare walls, but that the remuneration paid for the painting, papering, fitting-up, and all the decorations is to be called Interest for Capital.

Ricardo then says—"Adam Smith sometimes speaks of Rent in the strict sense to which I am desirous of confining it, but more often in the popular sense in which the term is usually employed. He tells us that the demand for timber, and its consequent high price in the more southern countries of Europe, caused a Rent to be paid for forests in Norway which could before afford no Rent. It is not, however, evident that the person who paid what he calls Rent paid it in consideration of the valuable commodity which was then standing on the land, and that he actually repaid himself, with a profit, by the sale of the timber. If, indeed, after the timber was removed, any compensation were paid to the landlord for the use of the land, for the purpose of growing timber, or any other produce, with a view to future demand, such compensation might justly be called Rent, because it would be paid for the productive powers of the land; but in the case stated by Adam Smith, the compensation was paid for the liberty of removing and selling the timber, and not for the liberty of growing it."

This objection of Ricardo's is manifestly of no weight, because Rent is in all such cases part of the profits of the produce of the soil, and the distinction made between the remuneration paid for the right of cutting that timber and the right of growing future timber is manifestly futile, because, though the sum paid for that single crop is limited, it is manifestly paid for the use of the productive powers of the earth, so far as regards that crop, just as much as the future produce of the productive powers of the earth.

Ricardo then goes on, "He speaks also of the rent of coal mines and of stone quarries, to which the same observation applies—that the compensation given for the mine or quarry is paid for the value of the coal or stone which can be removed from them, and has no connection with the original and indestructible powers of the land. This is a distinction of great importance in an inquiry concerning Rent and Profits, for it is found that the laws which regulate the progress of Rent are widely different from those which regulate the progress of Profits, and seldom operate in the same direction."

The objection taken by Ricardo to Adam Smith has no force whatever. The fact is, that his own definition of Rent is purely arbitrary and futile. It is a matter of utter impossibility to distinguish the portion of the remuneration which is paid for the use of the *original and indestructible* powers of the soil, and the

portion which is paid as interest of Capital expended upon it. To do that strictly, all the labour which has been expended upon bringing it from a state of nature must be called Capital expended upon it, and the remuneration paid for that must be subtracted from the Rent. And then what will remain for Rent? The fact is that the separation of Rent and Profit, as proposed by Ricardo, is a thing that cannot be effected, and is nothing more than a play upon words.

Having thus proposed a definition of Rent which is highly incorrect, Ricardo then goes on to explain how Rent arises. He says that on the first settling of a country in which there is an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of the actual population, or indeed can be cultivated with the Capital which the population can command, there will be no Rent. For no one would pay for the use of land, when there was an abundant quantity not yet appropriated, and therefore at the disposal of whosoever might choose to cultivate it, any more than he would pay Rent for the use of air, and water, or any other of the gifts of Nature, which exist in boundless quantities. It is only, then, because land is not unlimited in quantity, and uniform in quality, and because in the progress of population, *land of an inferior quality or less advantageously situated*, is called into cultivation, that Rent is ever paid for the use of it. "When, in the progress of society, land of the second degree of fertility is taken into cultivation, Rent immediately commences on that of the first quality, and the amount of that Rent will depend on the difference of these two portions of land. When land of the third quality is taken into cultivation, Rent immediately commences on the second, and it is regulated as before by the difference of their productive powers. At the same time the Rent of the first quality will rise, for that must always be above the Rent of the second, by the difference between the produce which they yield, with a given quantity of Capital and Labour. With every step in the progress of population which shall oblige a country to have recourse to land of a worse quality to enable it to raise its supply of food, Rent on all the more fertile land will rise."

Ricardo proceeds:—"Rent is always the difference between the produce obtained by the employment of two equal quantities of Capital and Labour."—"Rent invariably proceeds from the employment of an *additional* quantity of Labour with a proportionally *less* return"; and he then immediately proceeds to say, "When

land of an inferior quality is taken into cultivation, the exchangeable value of raw produce will rise, because more Labour is required to produce it."

Ricardo's doctrine is—"that corn which is produced by the greatest quantity of Labour is the regulator of the price of corn." And, again—"The reason, then, why raw produce rises in comparative value, is because more *Labour is employed in the production of the last portion obtained*, and not because a Rent is paid to the landlord. The value of corn is regulated by the *quantity of Labour* bestowed on its production on that quality of land, or with that portion of capital, which pays no Rent. Corn is not high because a Rent is paid, but a Rent is paid because corn is high; and it has been justly observed that no reduction would take place in the price of corn, although landlords should forego the whole of their Rent. Such a measure would only enable some farmers to live like gentlemen, but would not diminish the quantity of Labour necessary to raise raw produce on the least productive land in cultivation.

It is often said that Anderson was the originator of the Theory of Rent, which Ricardo afterwards adopted and developed. But, on comparing the two theories, it will be seen that though they have one part in common, namely, considering that Rent arises from differences in the fertility of soils, yet they are fundamentally different. Anderson, as a practical farmer, makes the high price of corn to proceed exclusively from the great *Demand* for it. This increased price causes it to be profitable to bring lands of decreasing fertility into cultivation, and consequently the lands which can produce corn at a cheaper rate can afford to pay a Rent. But Ricardo makes the whole price of corn to be regulated by the "Quantity of Labour" bestowed in obtaining the last quantity produced. Therefore, of course, all the corn produced at a cheaper rate can afford to pay a Rent. Now it so happens that the practical result of both theories is identical, and it is true. It is perfectly clear that the payment of Rent does not in any way influence the price of corn, and consequently if the landlords were to forego their Rents, it would not make corn any the cheaper, but the Rents would go into the pockets of the farmers. But as a question of Science, the Theories are fundamentally distinct: for Anderson's theory makes the Value of corn to be governed solely by Demand and supply; Ricardo's theory by "Quantity of Labour," or "Cost of Production."

In both theories, however, differences of the fertility of soils are

made the necessary condition of Rent arising, which we shall show hereafter is an error.

All believers in Ricardo's theory of Rent make Rent to arise from the differences in the fertility of soils : thus McCulloch says :—"The fundamental position laid down by Dr. Smith, that there are certain species of produce that always yield Rent, is contradicted by the widest and most comprehensive experience. Were such the case, Rents would always exist, whereas they are uniformly unknown in the earlier stages of society. The truth is that Rent is entirely a consequence of the *decreasing* productiveness of the soils successively brought under cultivation as society advances, or rather of the *decreasing* productiveness of the Capitals successively applied to them. It is never heard of in newly-settled countries, such as New Holland, Illinois, or Indiana, nor in any country where none but the best of the good soils are cultivated. It only begins to appear when cultivation has been extended to *inferior* lands ; and it increases according to the extent to which they are brought under tillage, and diminishes according as their culture is relinquished." McCulloch has a long note at the end of his edition of Smith, but as it contains nothing different from Ricardo, it is superfluous to quote it. McCulloch's observation that Rent does not arise in new countries where there is abundance of fertile land would be easily answered if it were true, because Rent cannot arise until the relation of Landlord and Tenant is established ; Rent being the sum paid to a landlord for the use of land ; and of course where there is abundance of land, every one would rather have land of his own than pay Rent to a landlord. And in the next place, it is not true that Rent does not exist in these new settled countries ; because the land in them belongs to the Government, and it is quite usual for the Government to demand a Rent for tracts of land. It is true, some colonies, for the sake of encouraging immigration, do give a certain amount of land free to desirable settlers ; but McCulloch's assertion that Rent is *never* paid in new settled countries is wholly contrary to fact.

Mill goes so far as to call Ricardo's Theory of Rent the *pons asinorum* of Economics. He adopts Ricardo's division of the classes of commodities, and says—"The value, therefore, of an article is determined by the cost of that portion of the supply which is produced and brought to market at the greatest expense. This is the Law of Value of the third of the three classes into which all commodities are divided." Again he says—"Rent, we again see, is the *difference* between the *unequal* returns to *different* parts of the

capital employed on the soil.”—“Thus Rent is, as we have seen, no cause of Value, but the price of the privilege which *inequality* of the returns to different portions of agricultural products confers on all except the least favoured portions.” Again—“Agricultural productions are not the only commodities which have several *different costs of production* at once, and which in consequence of that difference, and in *proportion* to it, afford a Rent.”

Thus Mill distinctly makes differences of Cost of Production a *necessary* condition of Rent arising. We shall see afterwards, however, that he is quite inconsistent with himself as to the regular law of price, and that in some passages he leans to Ricardo and in others to Anderson.

Carey's Theory of Rent.

This Theory of Rent was vaunted as a most wonderful discovery soon after it was published. But it met with a stout antagonist in Carey, the American Economist. In his first works he departed from the Theory, but he admitted men began by cultivating the best land first. Afterwards, however, he took up a new position altogether. He maintains that the first settlers in a country begin by cultivating the inferior soils. He says that the best lands are always covered with immense trees that they cannot fell, or that there are swamps that they cannot drain. These, he says, cannot be brought into cultivation till men and Capital increase. But the best lands are always spots of an inferior degree of fertility, on the hill sides, for instance, where the thin soil has prevented the growth of trees and shrubs, which are always brought into cultivation first, because they afford the readiest return for Labour.

Carey then attacks the Ricardo Theory of Rent, and says, “Nearly 40 years have elapsed since Mr. Ricardo communicated to the world his discovery of the nature and causes of Rent, and the law of its progress. The work by means of which it was first made known has since been the text work of that portion of the English community who style themselves, *par excellence*, political economists, and anything short of absolute faith in its contents is regarded as heresy, worthy of excommunication, or as evidence of an incapacity to comprehend them, worthy only of contempt. Nevertheless, imitating in this the action of the followers of Mahomet, in regard to the Koran, the professors, one and all, who have undertaken to teach this doctrine, insist upon construing it after their own fancy and modifying it to suit their own views and the apparent necessities of the age.”

of the case ; the consequence of which is, that the inquirer is at a loss to determine what it is that he is required to believe. Having studied carefully the works of the most eminent of the recent writers on the subject, and having found no two of them to agree, he turns in despair to Mr. Ricardo himself, and there he finds in the celebrated chapter on Rent, contradictions that cannot be reconciled, and a series of complications such as never before, we believe, was found in the same number of lines. The more he studies, the more he is puzzled, and the less difficulty does he find in accounting for the variety of doctrines taught by men who profess to belong to the same school, and who all agree, if in little else, in regarding the new theory of Rent as the great discovery of the age. . . .

“ At first sight, it looks to be exceedingly simple. Rent is said to be paid for land of the first quality, yielding one hundred quarters in return to a given quantity of labour, when it becomes necessary, with the increase of population, to cultivate land of the second quality, capable of yielding but 90 quarters in return to the same quantity of labour ; and the amount of Rent then paid for No. 1 is equal to the difference between their respective products. No proposition could be calculated to command more universal assent. Every man who hears it sees around him land that pays rent. He sees that that which yields forty bushels to the acre pays more rent than that which yields but thirty, and that the difference is nearly equal to the difference of product. He becomes at once a disciple of Mr. Ricardo, admitting that the reason why prices are paid for the use of land is that soils are different in their qualities, when he would *at the same moment, regard it as in the highest degree absurd, if any one were to undertake to prove that prices were paid for oxen because one ox is heavier than another ; that rents are paid for houses because some will accommodate twenty persons and others only ten ; or that all ships command freights because some ships differ from others in their capacity !* ”

“ It will be perceived that the whole system is based upon the assertion of the existence of a single fact, viz., that in the commencement of cultivation, when population is small, and land consequently abundant, the soils capable of yielding the largest return to any given quantity of labour alone are cultivated. The fact exists, or it does not. If it has no existence, the system falls to the ground. That it does not exist ; that it never has existed in any country whatsoever ; and that it is contrary to the nature of things that it should have existed, or can exist, we propose now to show.”

This, then, is the main purpose of his work. Carey, from a

general survey of different countries, maintains that men always have, and necessarily must have, commenced cultivation on inferior soils, and when men and capital increased have then progressed to bring the best soils into cultivation. The reason for this general and sweeping conclusion is, as above indicated, because the best and most fertile lands are always covered with forest or swamp, and the inferior lands free from them. Hence settlers begin with those lands most easily attainable. The universality of this law Carey attempts to prove. This, then, is the basis of his theory of Rent, and as seen above it is in diametrical opposition to that of Ricardo. He also maintains that as men and capital increase, and better lands are brought into cultivation, Rents rise, and population becomes better off.

Carey maintains the necessary universality of this course, and he has taken a wide survey of the history of nations in different ages, in all countries of the world, to prove its truth.

Now Carey has undoubtedly so far succeeded as this. He has certainly completely overthrown the basis of Ricardo's Theory of Rent, which depends on the universality of men occupying the *best* land first. It is indubitably true that in a great many cases men do begin with the light middling soils first. And this is all that is required by the laws of Inductive Logic. But to assert as a necessary, invariable, and universal law, that men do and must in all cases begin by cultivating the inferior soils is preposterous. In multitudes of cases men did begin cultivation on the best soils. It has often been remarked what a keen eye for good land the monks had. In multitudes of cases the monasteries will be found placed in the centre of the richest and best lands.

Now if there are abundance of cases, as there undoubtedly are, in which men began by cultivating the best lands, that is fatal to the generality of Carey's theory, just as the instances which he has adduced of men beginning on the light middling lands are fatal to Ricardo's theory. Each of them has perilled his theory on the universality of a particular course of proceeding.

From every general theory all accidental and particular circumstances must be eliminated. The particular state of the case as asserted by Ricardo is sometimes true, and the particular state of the case as asserted by Carey is also sometimes true; and therefore it is clear that neither is true as a general theory. A true general theory must include them both.

Years ago, when we read Ricardo's Theory of Rent for the first time, we wrote—"Another most abundant source of error is, when

two phenomena are related to each other, to mistake the cause for the effect. No more striking instance of this can be selected than the Theory of Rent propounded by Mr. Ricardo. In a few words, Mr. Ricardo's axiom is that the expense of raising corn on the worst land in cultivation will determine the average price of wheat, and afford and measure the rent of lands of a superior quality Notwithstanding these authorities, we have no hesitation whatever in saying that the Ricardo Theory of Rent is a mere delusion; and that it is fundamentally erroneous, inasmuch as it inverts the relation of cause and effect. From an intimate knowledge and observation of the action of prices in an agricultural district, and the views of farmers in taking farms, we have no hesitation in saying that it is *not* the cost of cultivating the worst lands which determines price, but the precise reverse, and *that it is the average value or price of corn which determines the worst quality, and most ill-situated land that can be cultivated with a profit, and also decides whether there can be any Rent for it.* . . . It is evident that this is no mere piece of vain logomachy, but is the very root of the matter; we have no hesitation in saying that Ricardo has inverted cause and effect, and that the whole Theory of Rent based upon this erroneous axiom is a delusion and a chimera, and that any course of action based upon so fallacious an axiom would infallibly lead to results precisely the reverse of what was intended and expected."

This we wrote from our own practical knowledge of the subject. Since that work was published, we have found that J. B. Say has urged exactly the same objection against Ricardo's Theory of Rent. Say says—"We shall see further that it is the same false conception of the origin of value which is the basis of Ricardo's Theory of Rent. He pretends that it is the cost which is obliged to be made to cultivate the worst lands which makes a rent to be paid for the better ones, whereas it is the wants of society which give rise to the demand for agricultural products, and raises the price of them sufficiently high for the farmer to make a profit to pay the owner of the land for the right of cultivating it."

And this view, which is exactly the same as ours, he enforces further on.

So also Dr. Chalmers points out exactly the same fallacy. "It is a signal error in a recent Theory of Rent that the difference of quality in soils is the efficient cause of it. . . . In affirming that it is the existence of this inferior land which originates the Rent, there is a total misapprehension of what may be termed the real Dynamics of the subject." And he says—"The error of the Ricardo system

of Political Economy on the subject of rent has been well characterised by Col. T. Perronet Thompson as the fallacy of inversion. It confounds the effect with the cause. It is not because of the existence of inferior soils that the superior pay a rent, but it is because the superior pay a rent that the inferior are taken into occupation."

Lastly, we may cite the opinion of the learned Judge, Mr. Justice Byles, who wrote to us—"I observe that in your economical writings you have assailed Ricardo's Theory of Rent. Fifty years ago I not only read Ricardo's book, but actually abridged it. Subsequent reflection and observation have convinced me that that theory is unsound, as indeed is most of his book." We are happy to cite these testimonies, all agreeing with our judgment.

We have seen that Anderson and Ricardo, with his followers McCulloch and Mill, all make Rent to arise from *differences* in the returns to Capital, either from difference of fertility, situation, or differences of Capital applied to the same soil. And unless there were these differences of returns, it is manifest from the extracts given from these writers, that, according to their theory, there could be no such thing as Rent. Now, let us suppose some vast plains of illimitable extent on the earth's surface; all of uniform fertility; with markets thickly distributed over them so that their situation is uniform; and also equal amounts of Capital expended on the soil; such as the plains of Bengal, or Lombardy, or such as the plains of South America along the Amazons might be. Now, in such a country as this, could not there be such a thing as Rent? According to the doctrine of Ricardo, McCulloch, and Mill, there could not be such a thing as Rent in such a country! The very statement of such doctrine is enough to call forth the amazement and ridicule of any practical man of business.

The Theory of Rent.

We have now to develop the Theory of Rent which is independent of *differences* of fertility, or *differences* of situation, or of *differences* of return to Capital.

First: What is the first thing necessary in order that Rent should arise?

It is that the relation of Landlord and Tenant should exist: Rent is the sum paid by one person to another for the use of land; hence, unless the land is owned by one person and let to another, there can be no such thing as Rent.

Secondly: From what does the possibility of Rent being paid arise?

It arises from this, that a few persons, especially with the assistance of horses, cattle, and agricultural implements, can raise from the earth a very much larger amount of produce than is necessary for their own subsistence.

Thirdly: Let us consider when, or under what circumstances, Rent will arise.

Let us suppose that there is a large tract of country belonging to a landlord, either the State, or a private person, and comprising many different kinds of soil of varying fertility.

Now, suppose that any portion of this soil is parcelled out among families in such a way that each family has got only just exactly enough for its own subsistence. Those placed on the better lands will of course require a smaller amount of land than those placed on inferior lands.

Now, if the land were parcelled out in this way, it is manifest that these families could pay no Rent for the land, because they have no surplus produce to pay as Rent.

Again, let us suppose the same land parcelled out among a number of families, each with a very much larger portion of land in their possession than is necessary for their subsistence. Then, as each family would be able to maintain itself entirely on its own land, it is evident they could pay no Rent, as there would be nobody to purchase any produce they might raise above their own wants. (Supposing that they did not export it to foreign markets.)

Supposing, while the land is parcelled out in this way, a town springs up. Then, of course, the inhabitants of the town cannot raise food for themselves, and the tenants in the country would find it profitable to grow food to sell to the dwellers in the town.

Of course, when the town was very small the demand would be very small, and therefore the price low; and therefore it would only pay to bring in corn from the land nearest the town. But as the numbers in the town increased, the demand would increase: the price of the corn would increase: the Rent of the land nearest the town would increase: and then it would pay to bring corn from the second zone of land. As the town continued to increase, the demand would still more increase: the price would go higher still: the Rent in the first and second zones would increase: and then it would pay to bring the corn from the third zone, and so on.

It is also clear that if there were only *one* centre of population, the price of the corn arising from the demand would indicate the

greatest cost that could be incurred in bringing the corn to market. And as this cost increased, there would be a zone from which it would just pay with ordinary profits to bring the corn to market, but which could pay no Rent.

Now Ricardo says that it is the cost of producing the corn from this outmost zone which *regulates* the price of all the corn sold in the market.

We say it is manifestly exactly the reverse. It is the price of the corn in the market which indicates the position of this zone.

Ricardo says—"When in the progress of society land of the second degree of fertility is taken into cultivation, Rent immediately commences on that of the first quality."

We say it is exactly the reverse, and that it is—When Rent commences on land of the first degree, land of the second degree will be taken into cultivation.

Ricardo says—"When land of the third quality is taken into cultivation, Rent immediately commences on the second. At the same time the Rent of the first quality will rise."

We say it is exactly the reverse, and that it is—When in the progress of society the price of corn rises, the Rents on the first and second qualities will rise, and then the third quality will be taken into cultivation.

Ricardo says—"When land of an inferior quality is taken into cultivation, the exchangeable value of raw produce will rise, because more labour is required to produce it."

We say that the sentence should have been written thus—"When the exchangeable value of raw produce rises, land of an inferior quality will be taken into cultivation, because more labour may be profitably employed to produce it."

Ricardo says—"The value of corn is regulated by the Quantity of Labour bestowed on its production, or that quality of land, or with that portion of capital, which pays no Rent."

We say it is exactly the reverse, and that—The value of corn indicates the worst quality of land upon which labour may be bestowed without paying Rent.

Ricardo says—"That corn which is produced by the greatest quantity of labour is the regulator of the price of corn."

We say it is exactly the reverse, and—That the price of corn indicates the greatest cost which will be employed in producing corn.

Now we have supposed only one centre of town population: and under such circumstances Rents would no doubt progressively

diminish till they vanished. But what need of supposing only one centre of town population? Let us suppose that there are any number of towns and markets spread all over the country. Then of course these numerous towns will tend to equalise Rents all over the country; and like as in Lombardy, we may suppose them so nearly equally spread over the country that differences of situation are practically annihilated. We may also suppose that equal portions of Capital have been applied to the land: so that the circumstances of an indefinite extent of country are absolutely equal. Now as long as the circumstances of the different parts of the country are different, Ricardo, McCulloch, and Mill allow that Rents may exist; but as soon as the circumstances are absolutely equal all over the country—the possibility of there being such a thing as Rent ceases to exist!!

Now such is the logical conclusion of the Ricardo Theory of Rent! and we simply ask, can such a doctrine be received by any sane man?

We thus, by this means, eliminate differences of fertility, situation, or application of Capital, from the Theory of Rent.

What, then, are the circumstances under which Rent arises? They are these:—

1. That the land must belong to a landlord, and be let to a tenant.

2. That the tenant shall have in his possession a larger amount of land than is necessary for his own maintenance.

3. That the population in some parts of the country be collected in such dense masses, that they cannot grow corn for their own subsistence on the land they occupy.

4. That the population in other parts of the country be scattered so widely, that they cannot consume the produce of the soil, but they may sell some of it to the town population.

Under such circumstances the tenants in the country can give their landlords a share of the profits made by selling the corn to the townspeople, and that share is called Rent.

The Payment of Rent does Not influence the Price of Corn.

Moreover, the payment of Rent has no influence on the price of corn, because it is not part of the *Cost of Production*, but it is a *Share of the Profits*.

The proof of this will be an excellent example of the truth of the General Equation of Economics we established elsewhere (**Value**).

It will also well exemplify a principle of great importance in the Theory of Taxation.

In many foreign towns an *octroi*, or custom house, is placed at the gates, at which duties are levied on all articles of food brought into the town.

Now suppose A keeps a farm outside the town, and brings his produce to the market. He is charged an *octroi* duty at the gates. This duty is part of the Cost of Production, *i.e.* of placing the produce in the market for sale. Hence he will add the duty to the price of the article, and the townsmen must pay it. Hence, of course, a tax on the product will raise its price.

Now if A is the possessor of the farm by himself, he will reap all the profits made by it. If he has a partner B, the same quantity of produce is brought into the market; but A and B will share the profits between them. A, no doubt, will have a less profit than if he was sole owner of the farm. But it is quite evident that because A has a partner B, and must share the profits with him, that can have no effect on the price of the produce. For this reason—the same *Quantity* is raised from the farm, and offered in the market, and there is the same *Demand* for it. Hence it is clear that *a tax on the product raises the price of the product, but a share of the profits will not.*

Now suppose A and B are landlord and tenant. Then the produce is raised, and brought to market; and the tenant pays the landlord a stipulated share of the profits. That cannot have any effect on the price of the produce, because it neither alters the Demand nor the Supply. Hence the price of corn cannot be affected, whether a single person produces it, or whether two do so in partnership. That is to say, it has no effect on the price of corn, whether one person produces it, or whether two produce in partnership. Hence, in strict accordance with the theories of Anderson and Ricardo, it is perfectly proved that if the landlords were to forego their Rents, it would have no effect on the price of corn, but the price would simply go into the pockets of the farmers.

Error of Ricardo on Tithes.

It is very strange that Ricardo, who agreed that Rent does not influence the price of corn, maintains that Tithes do. He says—“Tithes are a tax on the gross produce of the land, and like taxes on raw produce, fall wholly on the consumer.” Now it is quite manifest that Tithes are a share of the produce, just as Rent is. If

a farmer has to pay Tithes as well as Rent, it is quite clear that the produce of the farm is divided into three parts instead of two. But still the same Supply is brought to market, and there is the same Demand for it. Therefore its Price cannot be altered. The produce is shared between the Landlord, the Tenant, and the Parson, but that can have no effect on Price. Therefore the distinction made by Ricardo between Rent and Tithes is entirely erroneous. The distinction between a Tax on the Produce and a Share of the Produce, or the Profits, will be found to be of the greatest importance in the Theory of Taxation.

Self-Contradiction of Ricardo on Rent.

The slightest consideration will show that Rent and Tithes stand exactly on the same footing, and are exactly of the same nature. Rent is the share of the Produce which is given to the Landlord: Tithes are the share of the Produce which is given to the Parson. The whole Produce is divided into three parts; but as this Division of the Produce neither alters the Quantity brought into the market, that is, the Supply, nor the Demand, it is evident that neither of them alters Price. They in no way add to the Price of the Produce; nor would the Produce be any cheaper if Rent and Tithes were abolished. The only thing would be that the whole Profits would go to one person instead of to three.

Ricardo, however, considers Tithes to be a tax on the gross produce of the land, and, like taxes on the raw produce, fall wholly on the Consumer, and he says they raise the Price of the Produce.

Ricardo's doctrine on Tithes therefore is quite contradictory to his doctrine on Rent. But he equally contradicts himself on Rent. For he says—

“Rent, then, it appears, always *falls on the Consumer*, and never on the Farmer.”

“The Farmer, then, although he pays no part of his landlord's Rent, that being always regulated by the Price of the Produce, and *invariably falling on the Consumer*.”

“It must be admitted, then, that M. Sismondi and Mr. Buchanan, for both their opinions are substantially the same, were correct when they considered Rent as a Value purely nominal, and as forming no addition to the national wealth, but merely as a transfer of Value, advantageous only to the landlords, and *proportionably injurious to the consumer*.”

Now, when Ricardo in these passages says that Rent “*falls on*

the Consumer," and is "*injurious* to the Consumer," what can he mean except that the payment of Rent raises the Price of the produce to the Consumer? Thus he exactly contradicts his previous Theory. Thus he is shown to be in plain contradiction to himself on the only part of his Theory which is of any practical utility.

Self-Contradiction of Mill on Rent.

The absurdities and self-contradictions of the Ricardo Theory of Rent are strikingly exhibited in Mill.

He says—"Agricultural productions are not the only commodities *which have several different Costs of Production at once, and which in consequence of that difference, and in proportion to it, afford a Rent.* Mines are also an instance. Almost all kinds of raw material extracted from the interior of the earth—metals, coals, precious stones, &c.—are obtained from mines differing considerably in fertility; that is, yielding very different quantities of the product to the same quantity of Labour and Capital."

Now let us observe the necessary consequences of such doctrines. If the rent of mines arises solely from *differences* in the fertility of mines, and is only paid in consequence of that *difference*, it manifestly follows that if all the mines were of *equal* fertility there could be no such thing as Rent, a doctrine too absurd to require a moment's refutation. It would manifestly be just as absurd to say that Rent is paid for houses because houses are of different sizes, and that if all the houses in a great city, like London or Paris, were of the same size there could not be any such thing as Rent; or that Freights are paid for ships because ships are of different sizes, and that if all ships were of the same size, there could be no such thing as freights; or that wages or salaries are paid to men because men differ in capacity, and that if all men were of equal capacity there could be no such thing as wages or salary; and so on in innumerable similar cases; in short, if the Ricardo-Mill theory be true, prices are only paid for anything because things differ in quality or degree.

If the Ricardo-Mill Theory be true, that Rent only arises from *differences* of fertility between different Lands, Mines, or Houses, it would follow that if there were only a single piece of Land, or Mine, or House, no Rent could be paid for it! Nor is this by any means an imaginary case. There is but one mine at *Wentdown* in England, and according to the doctrine of Ricardo-Mill, no Rent can be paid for it; a doctrine at which no man would doubtless smile. Nor could it be otherwise.

of Paros, Carrara, or Pentelicus ; a doctrine so manifestly absurd as to require no refutation.

But, in fact, Mill himself has entirely overthrown this Theory of Rent.

He says—"Whatever be the causes, it is a fact that mines of different degrees of richness are in operation ; and since the Value of the produce must be proportional to the Cost of Production at the worst mine (fertility and situation taken together), it is more than proportional to that of the best. *All mines superior in produce to the worst actually worked will yield, therefore, a Rent equal to the excess. They may yield more, and the worst mine may itself yield a Rent.*"

So also he says—"If the whole land of a country were required for cultivation, *all* of it might yield a Rent."

Now if this be true, as it undoubtedly is, what becomes of the doctrine that Lands, and Mines, and all other things only yield a Rent in consequence of their being of *different* degrees of fertility ; and that Rent is the excess of the more fertile mines or lands above the least fertile one ?

If *all* Lands and Mines can pay Rent, how can Rent be "the *difference* between the *unequal* returns to different parts of the Capital employed on the soil" : or "the price of the privilege which the inequality of the returns to *different* portions of agricultural produce confers on all *except the least favoured portion* ?"

Thus in one place he defines Rent to be the excess of the returns of all portions above the worst : thereby expressly excluding the worst portion from the capacity of paying Rent ; and then he says in other places that *all* portions, even the worst, may pay Rent ! Can anything be more contradictory or absurd ?

It is obvious from these passages of Mill that he perceives that the Value of the produce is due to the *Intensity of Demand* and the *Limitation of the Supply* ; and that the difference of degrees of fertility in the mines is a mere accident. If *all* Lands and Mines yield a Rent, how can it be *essential* to Rent that they should differ in fertility ? As M. H. Passy truly observes, this is to take the circumstances which make a difference in the **Rate** of Rent for the **Cause** which produces Rent. In all these cases differences of fertility are the mere **Accident** of Rent, and not its **Essence**. It needs no ghost to tell us that Lands and Mines which possess superior advantages of fertility and situation will pay a higher Rent than inferior ones.

The capability of Rent being paid for a farm purely depends

upon the question whether the Value of the produce of the farm leaves sufficient Profits after defraying the Cost of Production, farmer's necessary profits, &c., to pay Rent. The capacity of a Farm to pay Rent depends purely on its own particular circumstances, and has nothing to do with the consideration whether other farms are more or less fertile than itself. And the Value of the produce depends purely on the Intensity of Demand and the Limitation of the Supply of the produce in the market; and the whole question is thus brought under the dominion of the General Equation of Economics.

It has already been shown that Anderson's Theory of Rent is radically different from Ricardo's: though they are often thought to be the same. Anderson makes the Value of corn to spring from the Demand, and he shows that it is the Price of Corn which indicates the worst land which can be brought into cultivation.

Ricardo makes the increase of Price to proceed from the increased Labour in obtaining the corn; and it is quite clear that Ricardo's doctrine is, that bringing worse lands into cultivation must precede, and is the cause of, the increase of Price; and this is the sense which both his opponents, Say, Chalmers, Thompson, and ourselves, as well as his admirer, McCulloch, attribute to him.

But Mill, in accordance with Anderson, says—"The higher the market value of produce, the lower are the soils to which cultivation can descend, consistently with affording to the Capital employed the ordinary Rate of Profit."

Now this is no doubt true; but it is diametrically the reverse of Ricardo's Theory of Rent, which Mill declares to be the *pons asinorum* of Economics.

The only case in which Ricardo's Theory would have a semblance of truth would be this, where a country had a regularly decreasing gradation of lands, stretching out to an unlimited distance: then in such a case the Rent which might be paid for the superior farms would be *indicated* by the difference in the Value of their produce and the Value of the produce of the last quantity of land in cultivation. But then it is a pure *accident* that there should be such an unlimited series. For the Ricardo Theory to be true it would necessarily require that there should actually be such a series.

On the Rent of Shops.

We thus see that the doctrine first positively announced by Anderson, and adopted by all Economists since, that Rent does not influence the price of agricultural products, such as corn, is

true. Such a product is brought into a common market which no single producer can influence, and therefore he must conform himself to its conditions. A certain general price is necessary to attract a certain supply; and the differences in the cost of production of each particular parcel can have no influence on its price. The supply will be produced so long as its value affords the cost of labour and ordinary profits. No one created the land itself, and therefore remuneration for the use of it is not part of the necessary cost of production: and if any particular parcel of its produce will not afford both ordinary profits and Rent, Rent, of course, will vanish first. The producers of corn are far too numerous to combine to limit the supply. For a considerable time it was attempted to limit the supply of foreign corn by prohibitive or protective legislation, but all such laws have been for ever rendered impossible in this country; and consequently corn will come in from foreign countries so long as the value of it here will yield the ordinary profits of trade.

But where the producers are fewer in number the case is different. The owners of mines of different sorts are comparatively few, and they can without any great difficulty come to an agreement to limit the supply. It has been alleged that the owners of coal mines have on several occasions agreed to limit the supply in order to maintain it at a certain level in order to preserve their rents; though the same rule would evidently apply to minerals as to corn, if the producers were too numerous to combine. Minerals of all sorts are the free gift of nature, and not the creation of man, and therefore a remuneration for them is not a part of the necessary cost of production: and if there were no arbitrary limitation of supply they would continue to be produced so long as the producers obtained ordinary profits.

But the case is different with shops. In these Rent does undoubtedly enter into price, because in such cases it is part of the necessary cost of production. No man created the land or the minerals; but shops are not the gift of Nature. They are created by the expenditure of capital, which is part of the necessary cost of production, and it must be replaced in the price of the articles. Moreover, each shop is a little market in itself, over which the producer has complete command, only controlled by other producers who are all in a similar position. A retail shopkeeper buys his goods at a certain price from the wholesale dealer, and he has a certain price to pay for rent; or if he built the shop himself he must have laid out a certain capital on it, and must have a certain

interest on that expenditure. He must also provide for his own maintenance. He expects to have a certain amount of custom; he therefore fixes such a price upon his articles as he estimates will provide for all these things. If he cannot obtain these returns he must give up his business. All his competitors are in exactly the same condition, and thus the producers have the command of the market. The prices which each may fix are only controlled by what he thinks his customers will give, and his fellow-competitors will enforce as well as himself. None of these competitors, however, can afford to sell below that amount any more than he can; consequently, in such cases rent is a part of the necessary cost of production, as being only the interest on capital expended: and production must cease unless such interest is afforded: and therefore in such cases it necessarily and justly forms a part of price.

It is easily seen that this is true by any one who considers the difference between the prices of fish, fruit, and vegetables as sold in shops where the shop is the fixed capital, and the same articles sold by costermongers in the street, whose only fixed capital is a barrow.

Conclusion of the Ricardo Theory of Rent.

Although we have arrived at exactly the same practical result as Ricardo, yet this is no immaterial dispute about words; it is not mere logomachy; but it is a fundamental difference of principle between two distinct systems of Economics. Ricardo has plainly inverted cause and effect. His views and principles are as entirely fallacious as if he had composed a treatise on heat, and laid it down as a fundamental principle that it is the rise of the mercury in the thermometer that regulates the heat of the atmosphere, or that the rise of the mercury in the barometer *causes* fine weather. And those who admire Ricardo's principles ought in consistency to maintain the two latter propositions. The schoolboy who screwed up his barometer to "Set fair," to ensure fine weather for his holiday, was a true disciple of Ricardo.

It is so extremely important to understand the nature of the fallacy which runs through the whole of the Ricardian system, that we may give another illustration. It is well known that the cultivation of certain agricultural products, and the climate they can flourish in, are intimately connected. At certain points the cultivation of maize, the vine, olives, the palm, ceases, and it is possible to ascertain by experience the average temperature of the country in which these things occur. Now, reasoning exactly as Ricardo does,

we ought to say that the boundaries of the cultivation of these products *regulate* the climate of that place ; when it is manifestly the reverse, it is the climate that *regulates* their production. The cultivation of a certain vegetable may *indicate* the climate, but it does not *regulate* it, any more than the speed of the paddle-wheels regulates the motion of the engines. The whole of Ricardo's palpable fallacy is based upon a misconception of the meaning of *to regulate*.

Or again, there is a certain kind of letter-weight which indicates the weight of the letter by raising a series of weights in succession ; now it is quite clear that it is not the last weight raised which *regulates* the weight of the letter ; but the weight of the letter which regulates which is the last weight which will be raised.

Exactly in the same way, it is not the cost of raising corn on the worst land which *regulates* the Price of corn ; but it is the Price of corn which regulates the cost which can be afforded for it, and which indicates the worst land which can be cultivated ; and the Price of corn is exclusively governed by the great Law of Supply and Demand.

We have now shown the entire fallacy of the Ricardo Theory of Rent : and brought the class of commodities it relates to under the dominion of the General Equation of Economics. That the Ricardo Theory should be true was contrary to the whole analogy of Physical Science. But the Principle of the Continuity of Science is completely vindicated, and there is seen the beautiful conformity between the Principles of Natural Philosophy and Reality, and a great triumph for the prophetic genius of Bacon.

Smith on Rents in Shetland.

Smith notices the high rent paid for land in some parts of Shetland—"The sea in the neighbourhood of Shetland is more than commonly abundant in fish, which make a great part of the subsistence of their inhabitants. But in order to profit by the produce of the water they must have a habitation upon the land. The rent of the land is in proportion, not to what the farmer can make by the land, but to what he can make both by the land and the water. It is partly paid in sea-fish ; and one of the very few instances in which rent makes a part of the price of that commodity is to be found in that country."

It is quite clear that it is exactly the reverse, and that rents in Shetland are paid out of the bountiful supply of fish. It is surprising

that Smith did not see that fishermen everywhere else must have a dwelling on land, as well as in Shetland, for which they must pay rent. And rent must bear the same relation to price everywhere else as it does in Shetland. Why should rent form a part of the price of fish in Shetland and not elsewhere? How is it possible that the Laws of Value can be fundamentally different in Shetland to all the rest of the world? This is just one of those examples which has brought the Science of Economics into such disrepute, because Economists, from want of a scientific education, make the whole subject a mass of contradictions and peculiarities, without any great fundamental principles. But the fault is evidently not in the subject, but in the manner of treating it.

A dwelling near the sea is necessary for the fishermen. The sea is part of their domain out of which they make their profits; and it is the abundance of the fish which enables them to pay a high rent for the land. And the rent no more enters into the price of the fish than the rent of corn land enters into the price of corn.

Rent in this case, as in all other cases of trading rents, arises out of the competition for a position by means of which profits may be made.

De Fontenay on Rent.

A French writer, M. de Fontenay, has seen this truth very clearly. He says: "It may be as well to say something here of one of the most striking instances of the advantages of position. I mean the high price paid for buying or hiring spaces in a great city. Some Economists have thought they see in that the rent of land: they have let themselves be duped by a word, as Montaigne would say. To think that it is really for a piece of land that one pays in Paris two or three hundred francs the metre, is as if one were to think that in buying the number of a hackney coach it is for three yellow numbers that he pays six to eight thousand francs, and that when a notary sells his practice, it is a double knob of gilt copper, twenty paper cases or so, five or six shabby tables, and a bad earthenware stove, that he sells for 500,000 francs. The space of ground, like the number, the practice, is only a representative sign of the acquired rights, a title to advantages and profits which may be discounted. What one pays for in the price of the space of ground is a share in the enjoyment of innumerable improvements of an advanced civilisation: it is an immense opportunity to exert oneself and to shine, to know and to be known.

It is a powerful agglomeration of rich consumers if one is a producer ; of producers and products of all kinds if one is more especially a consumer. It is a multitude of free enjoyments, the pavement, the *trottoirs*, gas, water, *fêtes*, theatres, palaces, walks, museums, shops, libraries, marts of all kinds of wealth, material and intellectual. The inhabitant of Paris who gives up to a stranger his share in these advantages has the perfect right to sell them to him at a good price. For it is he, or they whose right he represents, the citizens of a great city, who have gradually made it what it is. It is they who, by their labours, their sacrifices, their struggles of every kind, by their gold or by their blood, have acquired and paid for these rights, this security, this progress, this public luxury, these works of general utility, these refinements of civilisation, this immense development of intellectual and material life."

And De Fontenay most justly says in other parts of the same work—"Wherever there is a revenue you perceive capital"—"The theory of revenue must be the same for all classes of human production.

"Unfortunately this simple and sensible idea has been falsified by the spirit of system. Ask an Economist who knows the masters by heart what revenue is ; and he will answer : that industrial revenues, the net profits of the forge, of manufactures, of banking and commerce, &c., are the profits of *capital* ; but that the income from land—the net profit of the farm or the vineyard—is quite another thing ; that that is the price of a monopoly, a payment for the productive powers of the earth, a continued increase of the price of products, of interests opposed to the general interest ; in short, of fundamental laws and essential phenomena so radically different to the laws and phenomena of production generally that it has been necessary to make a separate division in the Science, and an entirely exceptional theory for the income from land ; or, as it is called, the rent of land.

"We propose here to abolish these false distinctions, incompatible with the character of harmony and simplicity which the laws of Economics ought to have, and to prove that there is one, and only one, law of Value, Income, and Capital under all its forms."

Again—"It is known that Economists who have attributed one part of the value of products to the action of natural agents have confined the application of their theory to a single class of phenomena—that of the appropriation and cultivation of the soil.

"It is not surprising that the human mind thus proceeds by

particular cases. It is quite natural that the analysis of production should begin by the first of human products.

“Of all the instruments of labour, in fact, the most indispensable, the most universally and the earliest employed, and consequently the most obvious, is unquestionably that most complicated instrument called *the earth*. Divided in its extent, varying in its powers, and its aptitudes so rigorously limited, so unequally divided among nations, families, and persons, that the possession or the desire for a greater part has in all ages been the principal object of wars and human discord, the earth everywhere, and at all times, has presented the phenomenon of profit under its most visible—and I will say also its most obnoxious—form; because from the earliest antiquity entire castes have lived upon the rent of land, freed from all labour by this excess of the labour of their fellow-men. Not only is agricultural labour the most ancient and the most important of all, but among many people it has been, and still is among some, the only industry, properly speaking. Not only is landed property the most visible form of capital, but it has long been, and still is in backward countries, the only capital—including, of course, landed capital, cattle capital, and slave capital, which are attached to it. The elevation of other branches of human industry to the rank of property is a fact so recent in the history of the world, that it is quite natural that the property and income of land have been studied, regulated by legislators, discussed by philosophers and statesmen, long before any other form of property and income.

“When Economic Science was founded, it was therefore to agriculture and extractive production that it first gave its attention. When it entered upon a wrong path in attributing production and value to Nature, all the errors and dangers of this system fell exclusively with all their weight on the property in land. It is somewhat strange, but if this error had been generalised it would perhaps have been less fatal and less tenacious: applied only to a particular case, as it has been, it has placed property in land in an exceptional and truly proscribed position. . . .

“That truly is an unpleasant position for the possessors of the soil, and it seems difficult from such premises to draw conclusions favourable to property in land. In fact, it is somewhat badly treated by this school. It is, according to J. B. Say, the least reputable of all property—in fact, it has for its origin conquest, a purely conventional right—it is a tolerated monopoly—a legal fiction, according to J. Garnier—a restriction on the laws of God, according to Scrope—a usurped privilege, according to J. B. Say—its useful purpose is

limited, according to Senior, to stretching out its hand to receive the offerings of the community—the class of proprietors' profits at the expense of the others, according to Buchanan—its interests are constantly opposed to those of the rest of Society, according to Ricardo—&c. &c. As for the rent of land, it seems that the *delenda Carthago* has been pronounced against it: one of the wittiest disciples of Ricardo calls it the product of a series of outrages against property from the earliest antiquity: many Economists flatter themselves that they can make it disappear by means of Free Trade:—Ricardo, Mill, &c., to make sure of this, have proposed to confiscate it legally by taxation: one of our official Economists has even written, 'We are coming to the time when all proprietors will be forced to cultivate or to sell, if they wish to have a revenue.'"

Again—"I certainly need not remark how nearly the passages I have just quoted approach the most aggressive eccentricities of Socialism. The difference here between the mortal enemy of property and its pretended defenders is, that *they* treat it as a parasite, a usurper, and a mendicant, while he bluntly calls it robbery—that M. Proudhon wishes to make all revenue disappear, and the others only suppress *rent*, which is, in their definition, only a part of revenue.

"Undoubtedly, then, this doctrine openly attacks property in land. Will the abolition stop there? The Economists of this school have thought that in limiting the application of their principle to one case they could say to logic—You shall not go further than we do. But logic laughs at their impotent authority; and it is easy to see that all property, both movable and immovable, is brought into question by the same attack.

"Since, then, in fact, it is necessary to distinguish two independent agents in production, man and Nature, two associates of whom one appropriates the wages of the other; instead of recognising only one agent, one voluntary and responsible active power—man; and an instrument inert, passive, indifferent to the good or evil of the result, and consequently unpaid—Nature. Immediately that the merit and the value of the work is attributed to the means of action, and not to the actual cause—to the force which obeys, and not to the will which commands—to unconscious matter, and not to the intelligence which foresees and directs; this principle, good or bad, must be followed out to the end. We must see in all classes of production that which emanates from the thinking producer, and that which is the work of the unintelligent producer—in short, we must

distinguish in the collective result the share of man and the share of the natural agent. For it is not in agriculture only that these natural agents appear: they most clearly act everywhere along with man, because everywhere man can only act by means of them, and everywhere they act in the same way. Human industry employs as aids light and heat, wind and waterfalls, the properties of imponderable fluids, mechanical and chemical action, innumerable combinations—in short, laws, movements, affinities, and throughout the infinite variety of physical phenomena, the forces of Nature present themselves with the same Economical characters as in agriculture. They are indispensable to production; they cannot be utilised without being appropriated; they are limited in their use and extent; unequal in power, etc. The profit of the manufacturer, like that of the agriculturist, results from their assistance, and is proportional to the extent and energy of their action. For if one manufacturer produces more, that is, at less cost than his neighbours—all personal qualities being the same—it is always because there they employ a man whom they must pay; he employs a natural agent, whom he does not pay. And since this economy in the cost of production only benefits him, as he, of course, sells exactly at the same price as his competitors with inferior processes, it is clear that he intercepts and appropriates the wages of his inanimate worker, and this interception exactly constitutes his superior profit.

“Hence in manufactures the differences of power among the agents employed are enormous, and so are the differences of profit which result from them.

“In the transport of merchandise, for instance, what a shocking inequality of power between the shoulders of a porter, horses and waggons, and a railroad! In spinning, what manual skill can turn the spindles or the wheel with the speed of mechanism? Be honest then—in manufactures, perhaps even more than in agriculture, it is the instrument which causes production. If therefore you attribute the power of the instrument to Nature, the share which Nature can claim in these profits is greater than in any others; and the greater profits of manufactures and commerce ought to be called *rent*, and the monopoly of *natural agents*, just as much as the moderate profits of 3 or 4 per cent. in agriculture. In short, in every kind of production you have the same mechanism, the same combination of the action of men with the action of Nature, the same differences in the rate of profit, the same influence of the instrument and capital over the result. More than that, you have

the same form in the division of the profit, you have the sale, the loan, and the lease ; the proprietor and the farmer, the capitalist and the worker, he who furnishes the instrument and he who uses it ; he who produces and he who only 'stretches out his hand to receive profit.' Either it must be clearly said that one has two weights and two measures ; that one is determined to find quite right in one case what is abominable in another, or we must apply strictly to the profits of manufactures the severe analysis applied to the profits from land ; we must extend to profits and interest (which only proceeds from them) and to capital this accusation of monopoly, of usurpation, of parasitism, which we have just seen so clearly expressed against rent and property in the soil.

"Thus we see all property, movable and immovable, destroyed, struck with the same charge of original injustice, and all reduced for protection to some article in the Code. It is not only as is now proposed that all rent must be confiscated by taxation : it is profits from manufacturers, an interest which must be attacked by a radical reform."

Again—"But, simple as it is, this way of looking at *produit-net*, profit, revenue, and their consequences, must necessarily escape all those who, like Ricardo, Rossi, Sismondi, Proudhon, &c., define Value as the 'quantity of Labour,' and measure it by cost of production.

"In fact, profit is precisely the excess of selling value, or actual value, above the cost of production or theoretical value. They then consider it as an anomaly, a robbery, an iniquity. Hence these distortions and contradictions into which they have all more or less fallen. Ricardo himself has fallen into it headlong with a curiously blind simplicity. The *produit-net* has, as is well known, three principal manifestations, rent of land, profits of manufactures, and interest of capital. Ricardo, in *rent*, explains it by monopoly and the price of natural agents ; in *profits* by a deduction by the employer from the wages of labour ; in *interest*, he never suspected that it is the same problem ; he admits interest as indisputable—educated and brought up on the London Exchange, from 3 to 5 per cent. was probably for Ricardo an article of faith. Proudhon, a much stronger and more daring logician, did not deceive himself as to the identity of the three words, *rent*, *profit*, and *interest* ; he has quite correctly placed them in the same class as *produit-net*—a service or product sold above its cost of production. And since, according to him, Ricardo, Rossi, Sismondi, &c., the cost of production is the theoretical measure of value, and is the just value, naturally all *produit-net*

appeared to him an iniquitous deduction, and he says that *rent*, *profit*, and *interest* are robbery—and I do not know how to reply to Proudhon, if you admit that Value is defined by the quantity of material labour, and measured in each particular case by the cost of production.”

Now, without finding it necessary to agree with all that M. de Fontenay has said in his remarkable volume on Rent, he has at least pointed out the fundamental fallacy of breaking up Economic phenomena into separate classes, and finding a separate law of value for each: and he has shown most irrefragably that rent, profit, and interest all proceed from the same cause—the excess of the Value above the cost of production, which can only be effected by the Intensity of the Demand and the Limitation of the Supply.

They all stand or fall together, and if the State has the right to confiscate the one, it has the right to confiscate the others; and we earnestly commend M. de Fontenay's volume to the attention of those who believe in Mill's scheme of confiscating the rent of land.

The Rent of land is an excellent example of the general Equation of Economics. Rent is the money paid by the farmer to the landlord for the use of the land. The first indispensable condition of rent arising is, that one person is the owner of more land than he can conveniently cultivate himself. A landlord is a capitalist whose capital consists of land; and, like all other capitalists, he either trades with it himself or lets part of it out to others to trade with, and of course he is entitled to receive interest for the use of his capital like any other capitalist. The difference between a landlord who cultivates his own land and a farmer, is just the difference between the man who trades with his own or on borrowed capital. A man who has a large amount of capital in land is in a very different position to one who has his capital in money, because no single man can trade with any very large amount in land. It is very rarely a man farms more than a thousand acres of land, but many a merchant trades with half a million of money. Now, unless a man can trade with his land himself, or get someone else to do so, it is of no value to him; but if the merchant cannot trade profitably with half a million of money, it will still be useful to him—he can always get some interest for its use, however small. It is, therefore, a positive necessity to a man who possesses a large estate to let part of it out to farmers. No misfortune to a large landed proprietor could be worse than to have a considerable extent of his estate thrown upon his hands at once. Now, this circumstance increases the power of the person who wants to borrow the capital over the one who wants to

lend it ; it is a greater service done to a landlord to take a farm, than it is to a tenant to let it to him. In this case, like as in other loans of capital, we must consider the farmer as the purchaser of the service ; but when the capital to be borrowed is land, the power of the purchaser over the seller is much greater than when it is money. Hence, we must expect that the price of it should necessarily be lower ; and this is what we actually find to be the case. The rent of land, or the money paid for the use of that species of capital, is much less than in the safest mercantile operation. There are, no doubt, other causes which also tend to produce a similar effect, operating simultaneously to increase the difference : but the cause we first assigned is a true cause of a certain amount of that effect, though not of the whole of it. The rent of land rarely exceeds $2\frac{1}{2}$ to 3 per cent. of the value of the land, and is often less than that.

During the great revolutionary war, a succession of bad harvests, joined to other causes, produced an enormous rise in the price of corn, so that in 1812 it reached the price of 150s. a quarter. Owing to this extraordinary rise of price, an immense quantity of inferior land was taken into cultivation at an extravagant cost, because the farmers expected that high prices would be permanent. Now, let us suppose that the old lands in cultivation had produced no more than they had done during the years of scarcity, what would have been the necessary consequence of this additional quantity of corn added to the market ? As the quantity of land taken into cultivation could only be increased gradually, the first quantity added to the existing supply would not have added much to it. The proportion between the increment and the existing supply would not have been great, consequently it would only lower prices a little, and would leave a large profit to the producer. But the more land that was brought into cultivation, the more would the quantity of corn brought to market be, and the more would prices be lowered. And this might go on until the constantly increasing quantities of corn lowered the price so much, that it would only just leave a profit, and further production would cease. And it is perfectly evident that it would always be the market price which would indicate how great an expense could be afforded as cost of production. Hence, we see that it was the increased price of corn that called inferior land into cultivation, and it was the increased quantity of corn produced that lowered the market price, until the cost of production and the market price might possibly meet. But whether they did so or not would entirely depend upon the quantity produced.

So, in the Highlands of Scotland, the rent of a sheep-farm depends upon the price of wool and sheep, and not the reverse. A Highland farmer would smile if he were told that the rent he paid raised the price of wool and sheep; when he knew well enough that the rent he could afford to pay depended upon the price of the produce.

Hence, also, we see the utter fallacy of Ricardo's rule, that it is the cost of production under the most unfavourable circumstances that regulates price. The truth is that it is the exact reverse. The price regulates the greatest cost of production that can be afforded, or the most unfavourable circumstances under which production can take place.

From these observations we gather that the farmer is just in the same position as the manufacturer; neither of them can command the price he pleases for the articles he has to sell; consequently they must each consider what will be the probable value of it when sold, and then they must devote the whole of their skill and energy in diminishing the cost of production. In order to do this each of them calls in the aid of science; the manufacturer in the mechanical form of machinery, the farmer in the chemical form of manures and draining, and every other means that science or skill can suggest to develop the productive powers of the earth. Neither of them can fix absolutely what the cost of production is, until every improvement in science has been adopted, and every resource exhausted. It is undoubtedly true that the cost of production and the value of the produce must have a relation to each other, but the question which is to govern the other is the whole difference between protection and free trade. Under the former system, the cost of production might be as extravagant and wasteful as possible; the land might be undrained and badly cultivated, and the object was to secure by law a price which should under all circumstances cover every conceivable piece of waste and bad management, which was, with somewhat of a *mauvaise plaisanterie*, called the *natural* price of corn. While the one system held out a direct reward for every species of mismanagement and ignorance, and stinted production, the other, on the contrary, encourages skill and energy, and stimulates production, and so confers upon the community at large the blessings of as great abundance and cheapness as circumstances permit.

Our formula at once explains a fact which is well known to every one who has a practical acquaintance with the management of estates, that it is far more advantageous for a landlord to have his

state divided into farms of moderate size than very large ones, because so many more persons have a moderate than a large quantity of capital, and consequently so many more are able to compete for a moderate-sized farm than a large one. The landlord being the seller of the service, his power over each competitor increases according to their number, and he can demand a higher price for it. But if a farm is very large, so few can compete for it, that the landlord's power over each diminishes, and he will usually be obliged to let it low. The same remark holds good in houses, and for the same reason ; houses of a moderate size let much better than those of a large one.

Malthus on Rent.

The fundamental objection to Smith's work is its total want of uniformity of principle. Each class of cases is explained by different principles, which is manifestly contrary to the fundamental nature of Natural Philosophy.

Colonel Perronet Thompson, who was a good mathematician, published a pamphlet entitled "*The True Theory of Rent, in opposition to Mr. Ricardo and others,*" in which he maintained that the simple cause of rent is everywhere the same as that which gives rise to the rent of the vineyard which produces Tokay. That this must be true is manifest to any one who has the slightest notion of a physical Science. But it is very surprising that Malthus, who was also a good mathematician, should dispute this. He says—"First : That the price of Tokay is not a necessary price, the same quantity could be produced although the price were considerably lower.

"Secondly : That neither the purchasers of Tokay, nor the cultivators of it, live upon the produce.

"Thirdly : That there is no limit to the price of Tokay but the tastes and fortunes of a few opulent individuals.

"How, then, can it possibly be said with truth that the simple cause of Rent is everywhere the same as that which gives rise to the rent of the vineyard which produces Tokay? and how entirely inapplicable is a reference to Tokay as an illustration of the true theory of Rent !"

It is amazing that so able a man as Malthus should bring so flimsy an objection against the manifest truth of Thompson's doctrine. Malthus's knowledge of mathematics should have shown him that it could by no possibility be anything else than true.

He says that neither the purchasers nor the cultivators of Tokay

live exclusively upon the produce. But neither do the producers nor the purchasers of any other article whatever live exclusively upon it. The cultivators and purchasers of corn do not live exclusively upon corn. The purchasers and cultivators of kelp do not live upon kelp. The producers and purchasers of stones from quarries do not live upon the stones. The producers and purchasers of shoes, cloth, or any other manufactures, do not live upon cloth or shoes. The growers and purchasers of cattle do not live exclusively on meat; and so on, of all other products; no person can live upon any single product. The producers and purchasers of all these things do not live upon them *directly*, but upon them *indirectly*, *i.e.*, upon their **Value**, that is upon the various things which they can get in exchange for them.

The cultivators of corn must have meat and clothing and many other things besides bread, which they obtain by exchanging a certain portion of their corn for these things; and the surplus Value of the corn which remains beyond that maintenance is what gives Profit and Rent.

So it is with shoes or any other product. Persons do not live upon them directly; but indirectly, by obtaining what they want in exchange for them, and the surplus value which remains after providing for their maintenance is profit.

It is manifestly precisely the same with Tokay. The producers of it must exchange away a certain portion of it to provide for their maintenance; and its surplus value above that gives Profit and Rent.

Now it is manifest that the whole Value of the product is due to the Intensity of Demand and the Limitation of Supply: and the greater the Demand and the greater the Limitation of Supply is, the greater will be the Value, the greater the surplus, and the greater the Profit and Rent.

Hence it is precisely the same principle in all products whatever; in Tokay, in corn, in kelp, in quarries, in cattle, in shoes, in manufactures of all sorts; it is the ratio of Demand and Supply alone which determines Value; and the greater the Demand and the less the Supply, the greater will be the surplus above cost. It is in all cases only a difference of degree, and not a difference of principle.

If the Supply were greatly increased the Value might so much diminish, that not only there might be no profit at all, but not even sufficient to defray the cost, and then production must cease. Formerly the preparation of kelp was protected by very high duties on barilla and salt. In consequence of this great quantities of kelp

are manufactured in the Western Islands and Highlands of Scotland, and brought great revenues to the proprietors. The kelp-shores of one island, North Uist, let for £7,000 a year; and about 20,000 tons were made in Scotland, which sold for about £20 a ton. After the war the duties on barilla and salt were repealed. Barilla was so much cheaper and of such superior quality, that the Value of kelp immediately diminished; at last it ceased to be produced, and most of the unfortunate proprietors whose incomes came principally from kelp, were totally ruined. Now, the cost and the qualities of the kelp remained exactly the same as before; but its Value was diminished by the greater cheapness and superior qualities of barilla. And since then barilla itself has, in its turn, been almost entirely superseded by the superior quality and cheapness of artificial soda.

The very same principle appears from Ricardo's theory of Rent. The actual quantity of corn necessary to support the producers remains exactly the same, whatever its Value may be. But as the corn, at whatever cost produced, sells for the same price in the same market, the portion of it produced with the least cost leaves the greatest margin between Cost and Value, out of which all Profit and Rent comes; and this excess of Value is entirely due to the intensity of the Demand and the Limitation of the Supply.

Thus the same principle governs all cases whatever, in strict accordance with the principles of Natural Philosophy: and the Value of every product, invariably and at all times, depends exclusively upon Demand and Supply.

From this it follows that if all landlords were swept away the consumers would receive no benefit. The products of the earth would not be sold the least cheaper. There would be exactly the same Demand and exactly the same Supply, and therefore the Value would remain the same. It can make no manner of difference to the consumer whether the whole profits go to the farmer alone, or whether they are divided between landlord and farmer.

It is precisely the same with a capitalist and a trader or manufacturer. These latter almost invariably carry on their trade by means of money borrowed at interest. But the interest is not a use of price, but must come out of Profits. If the trader traded with his own money, he and others would endeavour to limit the supply so that the Value of the product would afford an interest for the capital; and whether he takes that interest himself, or divides it with a capitalist, can make no difference to the consumer.

Thus we see that Nature alone gives quantities and qualities, but man alone gives Value; and whether Agriculture, Commerce, and

Furthermore, the banker agrees that his customer may transfer this Right of Action to anyone else he pleases, by means of a Bank-note or Cheque.

So this Right of Action may pass through any number of hands, and effect any number of exchanges, exactly like an equal amount of money, until the holder demands payment of it, and it is extinguished.

When the holder of the Cheque demands payment of it from the banker, the banker buys up the Right of Action against himself with Gold, and the holder of the Cheque sells his Right of Action for Gold.

The transaction is therefore a Sale or an Exchange, and an act of commerce.

Hence the whole series of these transactions are Sales or Exchanges. When the customer pays in money to his account it is an Exchange; when he pays away his Cheque in commerce it is an Exchange; every time the Cheque is transferred it is an Exchange; and finally when payment is demanded from the banker it is an Exchange. All these translations are acts of commerce.

This Right of Action is termed a **Credit**, because anyone who chooses to take it in Exchange for goods or services knows that it is not a Title to any specific sum of money in the banker's possession, but it is only an Abstract Right to demand a sum of money from him, and the person who takes it only does so because he has the **Belief** or **Confidence** that the banker can pay if required.

It will be convenient to state here that this Right of action is also termed a **Debt**, and that both in Law and common usage the words **Credit** and **Debt** are used quite indiscriminately to mean a Creditor's right of Action against his Debtor. The reason of this is explained under **Debt**.

Similarly when a merchant sells goods "on Credit," as it is termed, to a trader, he cedes the Property in the goods to the trader, exactly as if he had sold them for Money; and in exchange for the goods the trader gives the merchant his **Promise** to pay, or a Right of Action to demand Money at a future time—say three months—after date. This Right of Action is also termed a **Credit** or a **Debt**. It is the Price the trader pays for the goods. And if it be recorded on paper, in the form of a Bill of Exchange, it may be exchanged against other goods, and circulate in commerce, exactly like an equal sum of money, any number of times, until it is paid off and extinguished.

Again, suppose that the State wants to borrow money for any

from other people. Hence labour and services are the subjects of Rights, and therefore they are expressly included under *Res* in Roman Law.

Moreover, a person has the Right to enjoy his own character uninjured. Hence Personal Character is a *Jus in rem*; and a person whose character is attacked has an *Actio in rem*.

A banker's or a merchant's Credit is part of his Purchasing Power, or Wealth, just as the Labour of the working man is part of his Purchasing Power, or Wealth; and it is just as great a crime to rob a banker or merchant of his Personal Credit, as to rob him of his Money. Hence Personal Credit is a *Res*. And a banker or a merchant whose Credit is wrongfully attacked, has an *Actio in rem*.

RIGHTS.

The ancients unanimously held that **Exchangeability** is the sole essence and principle of Wealth, and that everything whatever which can be bought and sold, or exchanged, is Wealth, no matter what its form or its nature may be.

Thus, besides material things of all sorts, which everyone admits to be Wealth, an ancient writer showed, in a dialogue termed the *Eryxias*, that Labour is Wealth, because it can be bought and sold, or its *Value can be measured in money*.

But besides these two orders of Quantity, there is yet a Third which can be bought and sold, or exchanged, and whose *Value can be measured in Money*; and these are Abstract Rights of various sorts—Rights, and Rights of Action.

Suppose that a person pays in a sum of money to his account at his banker's—what becomes of that Money? It becomes the absolute Property of the banker. The customer cedes the absolute Property in the Money to the banker, but he does not make him a present of it. He gets something in exchange for it. And what is that something? In exchange for the Money the banker gives his customer a Credit in his books, which is a **Right of Action** to demand back an equivalent sum of Money whenever he pleases. But it is not a title to any specific sum of money in the banker's possession; it is a mere Abstract Right of Action against the person of the banker to demand a sum of money from him. The transaction is a Sale or an Exchange. The banker buys the money from his customer by issuing to him in exchange for it a **Right of Action**, and the customer buys this Right of Action with Gold.

Furthermore, the banker agrees that his customer may transfer this Right of Action to anyone else he pleases, by means of a Bank-note or Cheque.

So this Right of Action may pass through any number of hands, and effect any number of exchanges, exactly like an equal amount of money, until the holder demands payment of it, and it is extinguished.

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Again, suppose that the State wants to borrow money for any

public purpose—such as a war, or for some great public work—it buys money from those who are willing to sell it; and in exchange for the money, it gives them the **Right to Demand** a series of payments from the State, either for ever, or for a certain limited time. This **Right to demand** a series of future payments is termed an **Annuity**, and is the Price the State pays for the Money. In popular language they are termed the **Funds**, and the owners of these Rights may sell them again to anyone they please. They are **Saleable Commodities**, just like any material goods.

Suppose, again, that a person subscribes to the Capital of a Joint Stock Company—Banking, Railway, Insurance, Canal, Dock, or any other—he pays the money to the Company, which is a distinct Person, quite separate from any individual shareholders, and receives in exchange for it the **Right to share** in the future profits of the Company. These Rights are termed **Shares**, and they are also saleable commodities; they may be bought and sold like any material chattels.

So when a trader has established a successful business, he has the **Right** to receive the future profits to be made by the business. This **Right** to receive the future profits is a Property quite distinct and separate from the house, or shop, and the actual goods in them. It is additional to them. It is the product of Labour, skill, thought, and care, as much as any material chattels, and is a part of the trader's assets. It is termed the **Goodwill** of the business, and is a **Saleable Commodity**.

Thrale, the great brewer, appointed Johnson one of his executors. In that capacity it became his duty to sell the business. When the sale was going on, says Boswell—"Johnson appeared bustling about, with an ink-horn and pen in his button-hole, like an exciseman, and on being asked what he really considered to be the value of the property which was to be disposed of, answered—'We are not here to sell a parcel of vats and boilers, but the **Potentiality** of growing rich beyond the dreams of avarice.'" This latter phrase was merely Johnsonese for the **Goodwill** of the business. The price realised was, we are told elsewhere, £135,000.

When the banking house of Jones, Lloyd, & Co. sold their business to the London and Westminster Bank, it was said in the papers that the price paid was £500,000.

Similarly every successful business has a **Goodwill** attached to it, which is a **Saleable Commodity**, and an asset of the trader's.

So when an author has published a successful work, the **Right** to receive the profits to be made by multiplying copies of it is a valuable

Right, which may be bought and sold like any material chattel, quite separate from the printed copies of the work. This Right is termed **Copyright**, and is a Saleable Commodity.

So when a Professional man has established a successful business, the Right to receive the future profits of the business is a valuable Property, which may be bought and sold. This Property is termed a **Practice**; it is a Saleable Commodity. It is very usual for young professional men to establish themselves by buying a Practice, which then becomes Capital to them.

So there are many other kinds of Property which consist exclusively in Abstract Rights, such as Patents, Tithes, Tolls, Ferries, Shootings, &c., which we need not enumerate further, because our object is to describe a certain Order of Quantities, and not to enumerate them all.

Now these Abstract Rights cannot be seen, nor handled, nor touched. But they can be bought or sold, or exchanged. *Their Value can be measured in Money.* They can be transferred from one person to another as easily as any material chattels. Therefore they satisfy Aristotle's definition of Wealth. They all possess that Quality of **Exchangeability** which ancient writers unanimously, and modern Economists now at last, agree, is the sole essence and principle of Wealth. And therefore, by the fundamental laws of Natural Philosophy, these **Abstract Rights** are all **Wealth**.

General Rule of Roman Law that Rights are Wealth.

Now in the *Pandects* of Justinian, which are the great Code, or Digest, of Roman Law, it is laid down as a fundamental General Rule

“**Pecuniæ** nomine non solum numerata pecunia, sed omnes Res tam soli quam mobiles, et tam corpora quam **Jura** continentur.”

“*Under the term **Wealth**, not only ready Money, but all things, both immovable and movable, both corporeal things and **Rights** are included.*”

So the eminent Roman Jurist, Ulpian, says¹—

“Nomina eorum qui sub conditione vel in diem debent, et emere et vendere solemus. Ea enim **Res** est quæ **emi** et **venire** potest.”

“*We are accustomed to buy and sell **Debts** payable at a certain event, or on a certain day. For that is **Wealth** which can be bought and sold.*”

So it is also said²—“**Æque Bonis** adnumerabitur si quid est in Actionibus.”

¹ *Liber xxxiv. ad Edict.*

² *Digest, 50, 16, 49.*

“**Rights of Action** are properly reckoned as **Goods**.”

So also¹—“**Rei** appellatione et **Causæ** et **Jura** continentur.”

“Under the term **Property** both **Rights** and *Rights of Action* are included.”

So Sir Patrick Colquhoun says²—“The first requisite of the consensual contract of *emptio et venditio* is a **Merx**, or object to be transferred from the buyer to the seller: and the first requirement is that it should be *in commercio*: that is capable of being freely bought and sold. Supposing such to be the case, it matters not whether it is an immovable or a movable: corporeal or incorporeal: existent or non-existent: certain or uncertain: the property of the vendor or another: thus a Horse or a **Right of Action**: servitude or thing to be acquired: or the acquisition whereof depends on chance.

“A purchaser may buy of a farmer the *future crop* of a certain field, wine which may grow next year on a certain vineyard may be bought and sold at so much a pipe: or a certain price may be paid irrespective of quantity or quality, and the price would be due though nothing grew, or for whatever did grow. In the second case the bargain is termed *emptio spei*, and in the first and last *emptio rei speratae*, which all such bargains are presumed to be in cases of doubt.

“The cession of a **Right of Action** being legal in the Roman Law: The Right of A to receive a Debt due by B may be sold to C.”

Thus it is clearly seen that Abstract Rights of many various sorts, including **Rights of Action**, which in Law, Commerce and Economics are termed **Credits**, or **Debts**, are expressly included under the terms **Pecunia** (*Wealth*): **Res** (*Property*): **Bona** (*Goods or Chattels*): and **Merx** (*Merchandise*) in Roman Law.

General Rule of Greek Law that Rights are Wealth.

For nearly 500 years after Constantine removed the seat of Government from Rome to Constantinople, the language of the Court was Latin, but the people were Greek. Consequently as the official language was Latin, it was unintelligible to the mass of the people.

The great Code of Roman Law, termed the *Pandects*, was published in A.D. 530: but all the pleadings in the Courts were carried on in Greek. The Latin *Pandects* soon fell into desuetude:

¹ *Digest*, 50, 16, 23.

² *Summary of Roman Law. Digest*, 18, 34, § 1, 2.

Right, which may be bought and sold like any material chattel, quite separate from the printed copies of the work. This Right is termed **Copyright**, and is a Saleable Commodity.

So when a Professional man has established a successful business, the Right to receive the future profits of the business is a valuable Property, which may be bought and sold. This Property is termed a **Practice**; it is a Saleable Commodity. It is very usual for young professional men to establish themselves by buying a Practice, which then becomes Capital to them.

So there are many other kinds of Property which consist exclusively in Abstract Rights, such as Patents, Tithes, Tolls, Ferries, Shootings, &c., which we need not enumerate further, because our object is to describe a certain Order of Quantities, and not to enumerate them all.

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General Rule of Roman Law that Rights are Wealth.

Now in the *Pandects* of Justinian, which are the great Code, or Digest, of Roman Law, it is laid down as a fundamental General Rule

"**Pecuniæ nomine non solum numerata pecunia, sed omnes Res tam soli quam mobiles, et tam corpora quam Jura continentur.**"

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So the eminent Roman Jurist, Ulpian, says¹—

"Nomina eorum qui sub conditione vel in diem debent, et et vendere solemus. Ea enim **Res** est quæ emi et venire potest."

"*We are accustomed to buy and sell **Debts** payable at a certain day, or on a certain day. For that is **Wealth** which can be bought.*"

So it is also said²—"Æque **Bona adrem actionibus.**"

¹ Liber xxxiv. *de off. pro.*

they were superseded by Greek treatises, translations and compilations. The Latin *Institutes* of Justinian did not hold their place in the curriculum of legal education for more than ten years. They were superseded by the paraphrase of Theophilus, one of the Professors of Law who were charged with the compilation of the *Institutes*; and this paraphrase became the text book for the education of law students throughout the Eastern Empire.

At last, in the ninth and tenth centuries, under the Basilian dynasty, all the Pandects, *Institutes*, and Legislation of Justinian were set aside as obsolete. A reformed Digest or Code was published in Greek, which was called the **Basilica**—which may mean either the Imperial Constitutions, or the Code of the Basilian dynasty, like the *Code Napoléon*—and this henceforth became the Law of the Eastern Empire, and has remained to the present time as the Common Law of all the Greek population in the East, and is the Common Law of the modern Kingdom of Hellas.

And the Roman definition of Wealth is adopted and confirmed.

Thus it is said¹—“τῷ ὀνόματι τῶν Χρημάτων οὐ μόνον τὰ χρήματα, ἀλλὰ πάντα τὰ κινητὰ καὶ ἀκίνητὰ, καὶ τὰ σωματικὰ καὶ Δίκαια δηλοῦται.”

“Under the term χρήματα, or *Wealth* . . . **Rights are included.**”

Also²—“τῇ τοῦ πράγματος προσηγορίᾳ καὶ Αἵτιαι καὶ τὰ Δίκαια περιέχεται.”

“Under the term πράγματα, *Goods and Chattels*, both **Rights of action and Rights are included.**”

Thus it is seen that by express enactment in Greek Law, the words χρήματα and πράγματα include **Rights** and **Rights of Action**.

These Rights and Rights of Action are also included under the terms Ἀγαθά (Goods): περιουσία (Estate): Ἀφορμή (Capital): Οὐσία and Οἶκος (Wealth): and other similar words: they are also called οὐσία ἀφανής, Invisible Wealth. And these words include all the three orders of Economic Quantities.

General Rule of English Law that Rights are Wealth.

It is exactly the same in English, and every other system of Law—Abstract Rights or Property are included under the term “Goods,” “Goods and Chattels,” “Chattels,” “Merchandise,” “Vendible Commodities,” “Incorporeal Chattels,” and “Incorporeal Wealth” in English Law. And under similar terms in every other system of Jurisprudence.

¹ *Basil.* ii. 2, 214.

² *Basil.* ii. 2, 21.

And under **Wealth** and **Capital** in Economics.

A **Chattel** means any Property of any sort which is not freehold.

Thus Sheppard says¹: "All kinds of emblements, sown and growing, grass cut; all money, plate, jewellery, utensils, household stuffs, **Debts**, wood cut, wares in a shop, tools and instruments for work, wares, merchandise, carts, ploughs, coaches, saddles, and the like; all kinds of cattle, as horses, oxen, kine, bullocks, goats, sheep, pigs; and all tame fowl, swans, turkeys, geese, capons, hens, ducks, poultry, and the like, are accounted as **Chattels**."

"All Obligations, Bills, Statutes, Recognisances, Judgments, shall be as a **Chattel** in the executor.

"All *Right of Action* to a Personal Chattel is a **Chattel**."

So in Ford's case² it was resolved by Popham, Chief Justice of England and the Court that, "Personal Actions are as well included within the word 'Goods' in an Act of Parliament as goods in possession."

So Lord-Chancellor Hardwicke said³: "The Chattels are . . . the **Debts** (*i.e.*, Rights of Action) due and to be due . . . and **Debts** come within the words and meaning of the Act, and would pass in a will thereby."

Burnet, J., said: "A **Bond Debt** is certainly a **Chattel** . . . the conclusive case is *Ford's case*, that personal actions are included in the word **Goods** in an Act of Parliament, as goods in possession."

Parker, L. C. B., said: "But **Goods** and **Chattels** include **Debts** (Rights of Action). . . . Goods and Chattels comprehend things-in-action, in the construction of any Act of Parliament."

Lee, C. J., said: "The inquiry is whether *Choses-in-Action* are not included under Goods and Chattels? And I agree, *Choses-in-Action* will be included herein."

So Blackstone says⁴: "For it is to be understood that in our Law, Chattels, or Goods and Chattels, is a term used to express any Property, which having regard either to subject matter, or quantity of interest therein, is not freehold."

"Property, or Chattels Personal, may be either in possession or action. . . . Property in action is where a man has not the enjoyment (either actual or constructive) of the thing in question, but merely a Right to receive it by a suit or action-at-law."

So Mr. J. Williams says⁵: "Personal Estate is divided in

¹ *Grand Abridgement*, pt. i. s.v. Chattels; also *Touchstone*, vol. ii. p. 468.

² 12, Co. 1.

³ *Ryall v. Rowles*, 1, Vesey, 348.

⁴ Bk. ii. pt. i. c. 5.

⁵ *Encycl. Brit.* vol. xviii. Art. "Personal Estate."

English Law into Chattels Real and Chattels Personal; the latter are again divided into *Choses-in-possession* and *Choses-in-action*."

Rights of Action, then, being now shown to be Goods and Chattels, it is absolutely necessary to observe that it is the Abstract Right of Action itself which is the "Goods" or "Chattels," and not any material upon which it may be written down.

Rights of action, *i.e.*, Credits or Debts, may be bought or sold with perfect facility even in the Abstract state. It is, however, very usual to write them down on paper in the form of Bank Notes, Cheques, Bills of Exchange, and other instruments. By doing this they become capable of manual delivery, and are transferable from hand to hand like Money or any other material chattel.

Abstract Rights of Action are Incorporeal Chattels; but when written down on paper they become Corporeal Chattels, or Material Commodities, exactly like Money.

Hence the reader must observe that writing a Right of Action down on paper in no way alters its nature. Doing so is merely a convenient form of rendering it capable of being transferred in commerce. But it is exactly of the same nature and effects whether written down on paper or not.

Modern Economists include Rights of Action, i.e., Credits or Debts: under the term Circulating Capital.

It has been shown that the Economists steadfastly refused to admit Credits or Debts, *i.e.*, Rights of Action, to be Wealth.

But it has been shown in book i. chap. iii. that Smith expressly classes Bank Notes and Bills of Exchange under the term Circulating Capital; hence Smith expressly recognises the three orders of Exchangeable Quantities, and that Credits are Wealth and Capital.

Thus Smith expressly includes Money under the term Circulating Capital. And under Money he includes Bank Notes, Bills of Exchange, &c., which he terms Paper Money—which term is not quite correct—because though under certain circumstances Bank Notes and Bills of Exchange may be, and in an immense number of cases are, Money, as has been already shewn—still they are not absolutely Money. But they are all included under the term Paper Currency.

Among several passages it will be sufficient to quote one here¹—

¹ *Wealth of Nations*, bk. ii. ch. ii.

“Suppose that different banks and bankers issue Promissory Notes payable to bearer on demand to the extent of one million, reserving in their different coffers £200,000 for answering occasional demands. There would remain therefore in circulation £800,000 in gold and silver, and £1,000,000 in Bank Notes; or £1,800,000 of Paper and Money together.” He also observes that Credits in the Bank of Amsterdam were termed **Bank Money**. Thus we see that **Smith**, in this and numerous other passages, places Paper Credit exactly on the same footing as Money, as independent property, and of the same value as gold and silver.

So **J. B. Say** says¹—“The exclusive possession which in the midst of society clearly distinguishes the Property of one person from that of another in common usage, is that to which the title of **Wealth** is given [not unless this Property is Exchangeable] Under this title are included not only things which are directly capable of satisfying the wants of man, either natural or social, but the things which can satisfy them only indirectly, such as money, Instruments of Credit (*Titres de Créance*) and the Public Funds.”

Thus **Say** expressly includes **Instruments of Credit** and the **Funds**, which are mere **Rights of Action**, under the term **Wealth**: and he also includes Bills of Exchange, Bank Notes, and Bank Credits—which are all **Credit**—under the term **Capital**.

Thus he says that if a Bank can maintain in circulation a greater quantity of Notes than it retain specie in reserve, it augments by so much the **Capital** of the country.

So he also says²—“We must include under **Capital** many objects which have a value, although they are not material. The **Practice** of an advocate or notary, the **Custom** of a shop, the **Representative** of a sign-board, the **Title** of a periodical work, are undoubtedly Property (*Biens*)—they may be bought and sold, and be the subject of a contract; and they are also **Capital**, because they are the fruit of accumulated labour.” How are Bank Notes and Bills of Exchange, which **Say** admits to be **Capital**, the fruit of accumulated labour?

So **Mill** says³—“We have now found that there are other things, such as Bank Notes, Bills of Exchange and Cheques [which are Credit] which circulate as Money, and perform all the functions of it.”

¹ *Traité d'Economie Politique*, p. 1.

² *Cours d'Economie Politique*, pt. iv. chap. v.

³ *Principles of Political Economy*, bk. iii. ch. xii. § 1.

He also designates **Bank Notes** as **Productive Capital**.

Whately is the only English Economist, that we are aware of, who has drawn especial attention to Incorporeal Property.

He says¹—"The only difficulty I can foresee as attendant on the language I have been now using, is one which (*i.e.*, defining Political Economy as the Science of Exchanges) vanishes so readily on a moment's reflection, as to be hardly worth mentioning.

"In many cases where an exchange really takes place, the fact is liable (till the attention be called to it) to be overlooked, in consequence of our not seeing any actual transfer, from hand to hand, of a material object. For instance, when the copyright of a book is sold to a publisher, the article transferred is not the mere paper covered with writing, but the exclusive **Privilege** of printing and publishing. It is plain, however, on a moment's thought, that the transaction is as real an exchange as that which takes place between the bookseller and his customers who buy copies of the work. The payment of Rent for land is a transaction of a similar kind, though the land itself is a material object ; it is not this that is parted with to the tenant, but the **Right** to till it, or to make use of it in some other specified manner. Sometimes, for instance, Rent is paid for a Right of way through another's field, or for liberty to erect a booth during a fair, or to race or exercise horses."

And Whately says in a note to this passage—"This instance, by the way, evinces the impropriety of limiting the term Wealth to material objects."

Thus, in this passage is found the first dim perception, that we are aware of, that all Exchanges consist of the Exchange of Rights against Rights, as will be shown further on.

We need not multiply quotations—in fact, those we have already given are chiefly for the benefit of lay readers—because it is one of the most elementary principles of Mercantile Law, clearly enforced and explained by every Jurist in the world, that a simple abstract **Right of Action, Credit, or Debt** (and other abstract Rights with which we are not concerned in this work) is included under the terms *Pecunia, Res, Bona, Merx* ; *χρῆμα, πρᾶγμα, οἶκος, οὐσία, ἀγαθά*, &c. ; goods, chattels, goods and chattels, vendible commodities, incorporeal chattels, incorporeal wealth ; that Rights and Rights of Action can be bought and sold or exchanged, their Value can be measured in money, in every respect like any other material chattels.

The stupendous importance of this doctrine, that Rights and

¹ *Lectures on Political Economy*, p. 6.

Rights of Action are goods, chattels, merchandise, vendible commodities and wealth, consists in this, that modern commerce is almost exclusively carried on by means of Rights of Action, Credits, or Debts. Money is only used to such an infinitesimal degree that it may almost be neglected. The principal use of Money in commerce now is to keep such a stock of it as may be necessary to maintain the convertibility, or value of the circulating Credits.

Moreover, in recent times Rights, in the form of Securities of various sorts, and Rights of Action in the form of public and private Debts form a most important article of import and export between countries, and have exactly the same effects on the Foreign Exchanges, and the movements of Bullion, as material goods.

SHARES IN COMMERCIAL COMPANIES.

In comparatively recent times a gigantic species of Incorporeal Property has come into existence. Commercial enterprises are now conducted on such a colossal scale, that no single person possesses sufficient capital for them. They require the contributions of a large number of persons for them. When such Companies are formed, the Company itself is a *Persona*, quite separate and distinct from its individual members. Each subscriber pays over his money to the Company, and then he loses all right in it; and in exchange for the money, he receives a certificate entitling him to share in the profits made by the Company in the proportion in which he has subscribed to the capital. These certificates are called **Shares**. The members of a Joint Stock Company are like the Fund-holders; they have no right to demand back their subscriptions from the Company; but they can sell their Shares in the open market. Thus the Shares are a property quite separate and distinct from the Capital paid in; they are a mere abstract Right to share in the profits to be made by the future trading of the Company.

The Value of the Shares in no way depends upon the sum originally paid for them; but upon the income or profits made by the trading of the Company; and, of course, on the usual rate of interest. If the profits made by the Company fall short of the average rate of interest, the Shares fall to a discount; if the profits exceed the usual rate of interest, the Shares may rise to an enormous premium. The most striking instance that we are aware of between the cost of production, or the sum paid as Capital, and the value of the Shares as the Right to the future profits of the

Company, is the value of the Shares of the New River Water Company. When Sir Hugh Myddelton and his co-adventurers constructed this canal in the reign of James I., so little were the blessings of pure water understood by the citizens of London, that the patriotic projector was ruined, and obliged to sell his shares. However, the demand for water gradually grew, and with it the value of the Shares rose until an original Share of £100 was at one time worth £20,000, and was considered as a good dowry for the daughter of a wealthy City merchant. In 1878 parts of these Shares were sold at the rate of £93,000 per Share; and we believe that their value has increased since. All Shares in Commercial Companies are the *emptio spei*; and are one form of Incorporeal Property.

TITHES.

Tithes are one form of Incorporeal Property. The word is one of a numerous class, like Rent, Debt, Estate, Farm, and others which in reality mean Rights, but which in the corruption of common language have been misapplied to mean things.

In ecclesiastical law Tithes are the Right to demand the tenth part of the gross yearly income from the land; the stock upon land; and the personal industry of the inhabitants.

Tithes of the gross produce of the land itself, such as corn, hay, hops, fruits of all sorts, are called *prædial* Tithes; Tithes from the gross yearly increase of the stock upon land, such as calves, lambs, pigs, poultry, eggs, butter, cheese, &c., are called *mixed* Tithes; and Tithes from the gross income of personal industry of all sorts, handicrafts, and professions, are called *personal* Tithes.

By a series of Statutes extending from our Anglo-Saxon kings until Edward VI., and by a long series of Ecclesiastical Canons confirmed by Statute, every person was bound to pay one-tenth of his gross income, from whatever source arising, as Tithe. The tenth guinea earned by every lawyer, every medical man, every engineer, every merchant, every banker, every trader, and every trading concern, by the Bank of England and every Joint Stock Bank, by the *Times*, *Standard*, *Telegraph*, and every other newspaper, is as rightfully and legally payable as Tithe as the tenth sheaf, the tenth lamb, the tenth pig, the tenth egg, the tenth cheese, of the farmer. But all classes of the community have shuffled off this burden from their necks, except the agriculturists. These patient beasts of burden are now the sole persons who bear the weight of Tithes.

TRADE SECRETS.

Trade Secrets are a species of Immaterial Property, and a form of Property in Ideas. Persons may devise methods of combining material things in a certain way, which meets the popular demand, and keep such methods secret. Such trade secrets may produce large revenues to their discoverers, and therefore are Capital to them ; and they are capable of being bought and sold ; and, therefore, their *Value may be measured in money* ; and consequently they are Wealth and partnership assets. Such trade secrets are evidently the produce of pure Thought or Labour ; as much as any material chattels, and are a very valuable form of Wealth.

A very curious question has been raised, whether if a person becomes bankrupt he can be compelled to give up trade secrets to his Creditors like other property. In the 17th century a person in Scotland, named Anderson, discovered a method of making pills which became extremely popular, and the successive possessors of the secret made large fortunes. At last the possessor of it became bankrupt, and the Creditors claimed that the owner of it should give up the knowledge of this secret to his Creditors as well as his other property. The question was brought before the Courts in Scotland, but we are not aware whether it was ever cleared up ; and if so, how.

VALUE.

Whately says in the appendix to his *Logic*, p. 389 : “As Value is the only relation with which Political Economy is conversant, we might expect all Economists to be agreed as to its meaning. There is no subject as to which they are less agreed.”

This is essentially true, though it would be difficult to say on which subject Economists are in most disaccord with each other and with themselves. But the consequences of the erroneous doctrines on Value propagated by Adam Smith and Ricardo are so momentous and fatal that we must enter into a thorough examination of the subject.

Preliminary Remarks.

It has been shown in the article **Wealth** that ancient writers for 850 years unanimously held that Exchangeability is the sole essence and principle of Wealth, and that whatever can be bought

and sold, or exchanged, or whose Value can be measured in money, is Wealth, whatever its form or its nature may be.

The ancients also showed that there are three distinct orders of Quantities that satisfy these conditions: (1) Material things; (2) Personal Qualities, both in the form of Labour and Credit; (3) Abstract Rights.

After centuries of controversy, modern writers have at length come to the same conclusion as the ancients.

And as it is a matter of positive knowledge that there is nothing beyond these three Orders of Quantities which can be bought and sold, or exchanged, or whose Value can be measured in money, the Science is now complete. Consequently, having generalised all our Fundamental Concepts, so as to grasp all these three Orders of Quantities, by the Laws of Inductive Logic, we are sure that our Concepts cannot be overthrown or modified.

Now, if at any time the Proprietors of any two objects agree to exchange them, then each of the two Quantities is termed **The Value** of the other.

Suppose that at any time one ounce of Gold will exchange for 18 ounces of silver, then it is said that one ounce of Gold is *of the Value* of 18 ounces of Silver, which is simply this equation—

$$1 \text{ oz. of Gold} = 18 \text{ oz. Silver.}$$

Hence Value may be said to be the Sign of Equality between any two Economic Quantities.

We have then this Definition—

The Value of any Economic Quantity is any Other Economic Quantity for which it can be exchanged.

Hence any Economic Quantity has as many Values as other Economic Quantities it can be exchanged for, and of course, if it can be exchanged for nothing it has no Value.

Value, then, by the definition requires two objects, just as Distance and a Ratio require two objects. A single object cannot have Value, any more than a single object can be Distant or Equal. If we are told that any object is Distant or Equal, we immediately ask Distant from what? or Equal to what?

So if it be said that any object has Value, we must ask, Value in what?

It is also clear that as it is absurd to speak of a Quantity having Absolute, or Intrinsic Distance, or Equality, so it is equally absurd to speak of a Quantity having Absolute, or Intrinsic Value.

Hence the **Theory of Value** is the investigation of the **Laws** which govern the **Relations of these Exchangeable Quantities**.

The complete Theory of Value comprehends—

1. The Definition of Value.
2. The Origin, Cause, or Form, of Value.
3. The General Law of Value, or the General Equation of Economics.

On each of these three subjects there has been an immense amount of controversy, which we have endeavoured to reduce to a minimum in the present section.

SECTION I.

The Definition of Value.

I. Value, in its original sense, is a **Desire** or **Affection** of the **Mind**, towards some object : It means **Esteem**, or **Estimation**.

As Glo'ster says, in *Lear*—"In the division of the Kingdom, it appears not which of the Dukes he **Values** most."

So in *Troilus and Cressida*, Troilus says—

"For what is aught, but as 't is **Valued** ?"

So Henry Esmond says—"There is some particular prize we all of us **Value** : and that every man of spirit will venture his life for."

So J. B. Say says—"Value is a **Moral Quality**."

And other instances too numerous to cite.

Now a person may Value his friend very highly : or he may Value some object in his possession very highly : or he may desire to obtain something which is in some one else's possession very much. But as Economics is the Science of Commerce, or Exchanges, such Value does not enter into Economics.

To bring Value into Economics, a person must not only have an estimate of some object, or property, of his own : but he must have a Desire, or Value, for something which is in some one else's possession : and be willing to give some of his own property in exchange for it.

One person, however, cannot acquire an object which another person possesses, without giving him in exchange for it some object which that other person **Desires**, **Demands**, and **Values**.

Hence, *Economic Value necessarily requires the Concurrence of Two Minds*.

If a person brought a cargo of tobacco to a nation of non-smokers, it would have no **Value** among them : because no one among them would **Desire** or **Demand** it.

If a person brought a cargo of wine to a nation of teetotalers, it would have no **Value**: because no one among them would Desire or Demand it: and therefore no one would buy it.

It would be vain for farmers to breed cattle or herds among a nation of vegetarians: because no one would Desire them; there would be no **Demand** for them: and therefore no one would buy them.

However much a person may wish to sell his product, he cannot do so unless some one else will buy it: and in that case it would have no Economic Value. Hence, for an exchange to take place, there must be the Reciprocal **Desire**, or **Demand**, of Two persons, each for the product of the other.

When, however, two persons each **Desire** or **Demand** to obtain the product of the other: and when they have agreed as to the quantity of their own product which they will give in exchange to acquire the product of the other: each product may be said to be the **Measure** of the **Desire** of its owner to acquire the product of the other. The two products, therefore, Measure the Desire, Demand, or **Value** of their respective owners to obtain the product of the other: and when two persons have agreed upon the Quantities of their products to be exchanged, the two products are said to be **Equal Value**: each product is the **Value**, or the **Demand**, for the other. And this is the only kind of Value with which Economics is concerned.

Hence in every phenomenon of Economic Value, or Exchange, there are two **Quantities** and two **Demands**: and it is evident that the true Origin or Cause of Value is **Reciprocal Demand**.

Thus let A and B be any two Economic Quantities which are exchanged at any instant: then we may say—

A valet B

or, A is of the value of B,

or, $A = B$.

Then B is the value of A in terms of B: and A is the value of B in terms of A. And, therefore, Value is the Sign of Equality between any two Economic Quantities.

Thus Aristotle says¹—

“ἡ δ' ἀξία λέγεται πρὸς τὰ ἐκτὸς ἀγαθὰ”—

“Now the term **Value** is used in reference to **External things**.”

So it is said in Roman Law—

“Res tanti Valet quanti vendi potest”—

“The value of a thing is what it can be sold for.”

Nicomach. Ethics, bk. iv. c. 3.

The Greek word for Value is ἀξία : which is derived from ἄγω, one of whose meanings is to Weigh, or be of the weight of.

Thus Demosthenes, speaking of some golden goblets, says¹—

“ἀγούσα ἐκάστη μνᾶν”—“*Each one weighing a mina.*”

And he says of the sword of Mardonius²—“ὅς ἦγε τριακοσίουσ δαρείκους”—“*Which weighed three hundred darics.*”

So Homer says³—

“καὶ δὲ λέβητ' ἄπυρον, βοὸς ἄξιον, ἀνθεμόεντα
θῆκ' ἐς ἀγῶνα φέρων”—

“*And he offered, too, as a prize, a new caldron, ornamented with flowers, worth an ox.*”

Hence ἀξία meant Equality, weight for weight : as when two quantities placed in a balance are of equal weight.

So in Latin *æstimatio* means exactly the same as ἀξία : it means the quantity of Money (*æs*) given for anything.

Thus Cicero⁴ speaks of “*æstimatio frumenti*”—“*The Value of the corn to be furnished.*”

So Cæsar⁵ speaks of—“*æstimatio rerum et possessionum*”—“*The Value of their goods and chattels.*”

So Catullus says, 12, 11—

“Quod me non movet æstimatione”—

“*Which does not affect me on account of its Value.*”

So Value was also expressed by *ponderare*, and *pendere*, to weigh.

So Morocco says⁶—

“Pause there, Morocco,
And Weigh thy Value with an even hand.”

So Portia warns Shylock⁷—

“If the scale do turn
But in the *æstimation* of a hair,”

i.e. by the weight of a hair.

So Le Trosne says⁸ that Value is a new quality which products acquire when men live in society.

“Products acquire, then, in the social state, which arises from the community of men among each other, a new Quality. This new Quality is **Value** : which makes Products become wealth.

“**Value** consists in the **Ratio of Exchange**, which takes place between such and such a product : between such a Quantity of one product and such a Quantity of another product.

¹ *Against Androtion*, 617, 21.

² *Iliad*, xxiii. 885.

³ *Bell. Civil.* 3, 1.

⁷ *Ibid.* act iv. sc. 1.

² *Against Timocrates*, 741, 7.

⁴ *Ver.* 2, 53.

⁶ *Merchant of Venice*, act ii. sc. 7.

⁸ *De l'Intérêt Sociale*, ch. i. sec. 4.

“**Price** is the expression of **Value**: it is not separate in Exchange: each thing is reciprocally the price of the merchandise: in a Sale the Price is the Money.”

Hence it is clear that Value is a **Ratio**, or an **Equation**: like Distance and an Equation, it necessarily requires two objects.

The Value of anything is always something **external** to itself. Hence a single object cannot have Economic Value. A single object cannot be Equal, or Distant. If an object is said to be Equal or Distant, we must ask—Equal to what? or, Distant from what? So, if any quantity is said to have Value, we must ask—Value in what? And as it is absurd to speak of Absolute or Intrinsic Distance: or Absolute or Intrinsic Equality: so it is equally absurd to speak of Absolute or Intrinsic Value.

It is impossible to predicate that any Quantity has Value, without at the same time implying that it can be exchanged for something else: and of course everything it can be exchanged for is its Value in that commodity. Hence any Economic Quantity has as many Values as Quantities it can be exchanged for: and if it can be exchanged for nothing it has no value.

Examples of Value.

2. Any Economic Quantity may have Value in terms of any other.

Suppose that A as above is ten guineas: then B may be any one of the other three species of Economic Quantities. It may be a watch, or so much corn, or wine, or clothes, or any other material chattel.

Or it may be so much Labour, Instruction, or Amusement, or Service.

Or it may be a Right of Action, or a Debt: or the Funds: or a Copyright: or any other Abstract Right.

Each of these species of property is of the Value of ten guineas: and it follows that each of them is equal in Value to the other: because, *Things which are equal to the same thing are equal to each other.*

The Value of the Money in the pockets of the public is the products, services, and Rights it can purchase. The Value of the goods in the warehouses of merchants and traders is the Money in the pockets of the public.

The Value of an Incorporeal Right is the thing promised which may be demanded.

The Value of a £5 Note is five sovereigns: the Value of a postage-stamp is the carriage of a letter: the Value of a Railway Ticket is the journey: the Value of an Order to see the play, is seeing the play: the Value of a Promise to cut a man's hair is the cutting of the hair: the Value of an Order for milk, bread, wine, soup, coals, &c., is the milk, bread, wine, &c.

If I want a loaf of bread which costs a shilling: what difference does it make to me whether I have a shilling, or the Promise of the baker to give me a loaf? It is clear that in this case the Shilling and the Promise are of exactly the same Value to me.

Suppose that the price of cutting a man's hair is a Shilling: what difference does it make to me whether I have a Shilling, or the Promise of the hairdresser to cut my hair? In this case it is clear that the Shilling and the Promise are of exactly equal Value to me.

In short, in the case of every product and service, the Money to purchase it with, and a promise to render the product, or service, are of exactly equal Value in each separate case.

Each separate tradesman of course only promises to render one particular product, or service: and as the product, or service, is not demandable from anyone else, each promise has only **Particular Value**: and as that person may become bankrupt, or die, the Promise has only **Precarious Value**.

Now what is Money by the unanimous consent of Economists? It is nothing but a general Right, or Title, to demand a product or service, from any person who is in the habit of rendering them at any time: and as there is always some person who can render them, if another cannot: **Money has General and Permanent Value**: while each of these Promises has only **Particular and Precarious Value**.

Each of these separate Rights, then, is of exactly the same Nature as Money: but it is of an inferior degree. But they are, each of them, Economic Quantities, or Wealth; for the very same reason that Money is. Is it not clear that if a person had his pockets full of Promises by solvent persons to render him all the products and services he might require, he would be exactly as Wealthy as if he had so much Money? And he can always sell, or exchange, any of these orders for orders for a different thing. Hence we see the perfect justice of the doctrine of all Jurists that **Rights are Wealth**.

On Negative Values.

3. Value, then, being the Desire, or Affection of the **Mind**, towards some object, may be of two forms: either the Desire to **Acquire** some object, or the Desire to **Get rid** of it.

As these Desires are Inverse and Opposite, they may be denoted by opposite signs: if the Desire to obtain something be termed **Positive Value**, the Desire to get rid of something may be termed **Negative Value**.

Thus if we consider a piece of land just in the fit state to be cultivated, to be in the state o : it may be covered with primeval forest, with marshes and fens, with jungle, and huge boulders: or any other obstructions to cultivation. It may require a considerable sum of money to clear away all these obstructions and bring it into a fit state for cultivation, which we have denoted by o : the sum necessary to clear away all these obstructions, and bring it into the state o , may be termed its **Negative Value**.

So when it is intended to build a street of improved houses, the ground when it is in a state fit to be built upon, may be denoted by o : but it may be covered with old buildings, which it is necessary to clear away before it is fit to be built upon: the sum necessary to be spent in clearing away these old buildings, and bringing it into a state for the erection of new ones, may be termed its **Negative Value**.

So if the state of a person in health be denoted by o : he may fall into illness and require the services of a physician: or he may meet with an accident and require the services of a surgeon to bring him into a state of health. As the fees paid to the physician or surgeon are paid for removing obstructions to health: they may be termed **Negative Values**.

If all people were perfectly honest and never invaded the Rights of other people, a very large portion of the fees paid to members of the legal profession would be saved: if we consider the state of a person in possession of his Rights as o : all the sums expended in defending, maintaining, and recovering his Rights are spent in removing the obstructions to his enjoyment of his Rights: and may be termed a **Negative Value**.

If we consider persons in the enjoyment of perfect security as to their persons and property as o : and if people were perfectly honest and never attacked their neighbours' persons and property, there would be no use for the police: hence all sums spent on the police,

which are spent merely for the purpose of warding off attacks on person and property, may be termed a **Negative Value**.

If the reign of universal peace had come, and nations did not attack one another: the enormous armaments by sea and land which weigh down the population and finances of all European nations might be saved. So all the sums spent by nations on their fleets and armies are **Negative Values**.

So many other instances of *Negative Value* might be cited.

Hence, generally, Positive Value is the desire to acquire something ; Negative Value is the desire to get rid of something.

Now it is evident that all the sums spent on Negative Values, or on removing obstructions, are just so much subtracted from Positive Values, or the acquirement of Wealth, or enjoyments.

We thus see what a gigantic obstruction to progress and Wealth these European armaments are : and what an immense advantage in progress of Wealth it is to America to be free from them : and to devote all the money and people employed in Europe on Negative Values to the increase of Positive Values.

It was the observation that there are two kinds of Value, Positive Value and Negative Value, to which we first drew attention, which led Stanley Jevons, as he acknowledged, to designate Economics by the somewhat fantastic title of the Calculus of Pleasure and Pain.

There may be General Rise or Fall of Prices : but not of Values.

4. Price is the Value of any Economic Quantity in Money or Credit. Now if Money or Credit be very greatly increased, or decreased, in Quantity, the Prices of all other Economic Quantities may rise or fall : but they will still preserve their relations among each other.

If a loaf of bread and a pound of meat each cost a shilling : and if in consequence of a great increase in the Quantity of Money, or Credit, they each rise to two shillings : or if in consequence of a great decrease in the Quantity of Money, or Credit, they each fall to sixpence : the loaf of bread is still of the Value of a pound of meat.

Hence there may be a general Rise, or a general Fall, of Prices.

But there can be no such thing as a general Rise, or a general Fall, in **Values**. Everything can no more rise or fall in Value with respect to everything else, than, as Mill says, a dozen runners can each outrun the rest : or a hundred trees can each overtop each other.

To suppose that all things could rise relatively to each other would be to realise Pat's idea of society, where every one is as good as his neighbour, and a great deal better, too.

The opposite case of everything falling in Value with respect to everything else would be analogous to every one thinking himself inferior to every one else: which, according to human nature and St. Paul, would be an impossible case.

Nothing can have Fixed Value unless Everything has Fixed Value.

5. As Value is the Ratio in which any two Quantities will exchange, it is clear that the Value of A with respect to B varies directly as B: that is, that it increases or decreases according to the greater or less Quantity of B that A can purchase. And the Value of B in terms of A varies directly as A: that is, it increases or decreases according as B can purchase more or less of A.

It is also clear that if from any cause whatever the Value, or Ratio, between A and B has changed: the Value of both of them has changed.

It is manifestly as absurd to say that the Value of A has changed with respect to B: but the Value of B has remained the same: as it would be to say that a railway station has remained at the same distance from a train, while the train has increased its distance from the station.

Moreover it is as absurd to say that a Quantity has changed its own Value: or kept its own Value fixed: without stating the Quantities with respect to which its Value has changed or remained fixed: as it would be to say that an object has changed or preserved its Distance, or its Ratio, fixed: without saying its Distance from what: or its Ratio to what.

Hence it is clear that nothing can have **Fixed**, or **Invariable Value**: unless everything else has Fixed and Invariable Value as well. Because, though a Quantity may retain its Value unchanged with respect to a certain number of Quantities: yet if its Value has changed with respect to other Quantities: its Value has changed.

From this it will be seen that it is utterly futile to seek for a Currency, or Circulating Medium, of Fixed or Invariable Value.



SECTION II.

On the Origin, Source, or Cause of Value.

6. We now come to the second branch of our inquiry—What is the **Origin, Source, or Cause, of Value?** Or, in the language of Bacon—What is the **Form of Value?** And whence does it originate?

Now, when we are to search for the **Cause** of Value, it is necessary to understand what we are searching for. There are three distinct orders of Quantities, each containing many varieties, which all have Value. We have to discover some **Single Cause** which is common to them all : and ascertain what that Single cause is by genuine induction.

Bacon says¹—“But the Induction which is to be available for the discovery and demonstration of sciences and arts, must analyse nature by proper rejections and exclusions : and then after a sufficient number of **Negatives**, come to a conclusion on the Affirmative instances.”

Also²—“What the sciences stand in need of is a form of Induction which shall analyse experience, and take it to pieces and by a due process of exclusion and rejection, lead to an inevitable conclusion.”

The first step in this process of Induction is to make a complete collection of all the different kinds of Quantities, of whatever nature they may be, which have Value³—“For whoever is acquainted with Forms [*i.e.*, Causes] embraces the unity of Nature in substances the most unlike. From the discovery of Forms [Causes] results truth in Theory and Freedom in Practice.”

Bacon earnestly inculcates as the foundation of all true science a careful collection of all kinds of instances in which the given nature is found⁴—“The investigation of Forms [Causes] proceeds thus : a nature [such as Value] being given, we must first of all have a presentation before the understanding of all known instances which agree in the same nature, *though in substances the most unlike* : and such collection must be made in the manner of history, without premature theory.”

Bacon then exemplifies his method by an investigation into the Form, or Cause, of Heat. He gives tables of the divers instances agreeing in the nature of Heat ; also where it appears in different

¹ *Nov. Org.* bk. i. aph. 105.

² *Nov. Org.* bk. ii. aph. 3.

³ *Distributio Operis.*

⁴ *Nov. Org.* bk. ii. aph. 11.

degrees¹—"The work and effect of these tables I call the presentation of instances to the understanding ; which presentation having been made, Induction itself must be set to work ; for the problem is upon a review of instances, all and each, to find such a nature as is always present or absent with the given nature ; and always increases and decreases with it ; and which is, as I have said, a particular case of a more general nature.

"We must therefore make a complete solution and separation of nature, not, indeed, by fire ; but by the **Mind**, which is a kind of divine fire. The first work, therefore, of true Induction (so far as the discovery of causes) is the rejection or exclusion of the several natures which are not found in some instances where the given nature is present ; and are found in some instances where the given nature is absent ; or are found to increase in some instances where the given nature decreases ; or to decrease where the given nature increases. Then indeed, after the rejection and exclusion has been duly made, there will remain at the bottom, all light opinions vanishing in smoke, a Cause affirmative, solid, and true, and well defined."

As an indispensable part of Induction is the rejection of erroneous causes²—"I must now give an example of the exclusion and rejection of natures, which, by the table of presentations, are found not to belong to the Form, or Cause [of Value], observing in the meantime not only each table suffices for the rejection of any nature, but even any one of the particular instances contained in any one of the tables. For it is manifest from what has been said, *that any one contradictory instance overthrows a conjecture as to the Cause.*"

Investigation of the Form or Cause of Value.

7. Bacon has exemplified his process of Induction by investigating the Form, or Cause, of Heat ; our present task is to investigate the **Form, or Cause, of Value.**

Following the example of the mighty Master, we must begin by making a complete collection of all the Instances of Value. That is, we must enumerate all the different kinds of Quantities, with all their varieties, which have Value.

These are :

1. **Corporeal or Material Quantities** ; under this species are comprehended the following varieties :

Lands, Houses, Trees, Cattle, Flocks and Herds of all sorts, Corn

¹ *Nov. Org.* bk. ii. aph. 16.

² *Nov. Org.* bk. ii. aph. 18.

and all other fruits of the earth, Furniture, Clothes, Money, Minerals of all sorts, Jewellery, Pearls, Manufactured articles of all sorts, Fish, Game.

2. **Immaterial Quantities** ; comprehending Labour of all sorts, agricultural, artisan, professional, scientific, literary, trade secrets, news.

3. **Incorporeal Quantities** ; comprehending Rights of Action, Credits or Debts, the Funds, Shares in commercial companies, Copyrights, Patents, the Goodwill of a business, a Professional Practice, Tolls, Ferries, Tithes, Advowsons, Rents, Shootings, Fishings, Market Rights, and all other Valuable Rights.

We must now investigate the **Cause of Value** in all these different kinds of Quantities, and in all their varieties, and in each one separately. We must first by a due course of Rejections and Exclusions eliminate all accidental and intrusive ideas which may in some cases be associated with Value ; and in other cases not ; and after completing this course of Rejections and Exclusions, we must end by an **Affirmative** ; and discover that **Single General Cause**, which is common to all these different classes of Quantities ; which, being present, Value is present ; which, when it increases, Value increases ; which, when it decreases, Value decreases ; and which, being absent, Value is absent.

Materiality is not Necessary to Value.

8. Now in examining these three classes of cases which all have Value, we observe that the whole class of Immaterial Quantities, and the whole class of Incorporeal Quantities, have Value, but have no Materiality.

Hence it is evident that **Materiality** is not **Necessary** to Value : it is only in some cases the **Accident** of Value.

Permanence, or Durability, is not Necessary to Value.

9. We also observe that some things which have Value last for ever, like the Land, the Funds, Precious Stones, Statues, Coins.

Other things may last a very long time, such as houses, watches, pictures. Other things have a very much less degree of durability, such as clothes, animals. Others have a very short degree of durability, such as food, flowers.

But Labour, which in many cases has very high Value, perishes in

the very instant of its production, and therefore has no durability, or permanence at all.

Thus, Quantities which have Value, have all degrees of permanence or durability. Now among Bacon's Prerogative instances he mentions Ultimity, or Limit, and says¹—"Nor should extremes in the lowest degree be less noticed than instances in the highest degree."

This is the doctrine of the *Law of Continuity*, which says—

"That which is true up to the Limit, is true at the Limit."

From these principles it follows that things which have the lowest degree of permanence, or durability, which is 0, are to be included in Economics, as well as those which have the degree, *i.e.*, which last for ever.

Hence it is seen that **Permanence**, or **Durability**, is not **Necessary** to Value; it is only the Accident of Value.

Error of the Doctrine that Labour is the Cause of Value.

10. Having shown that Materiality and Permanence are in no way necessary to Value; we have now to discover the **Cause** of Value.

A doctrine which has obtained great hold over English Economics is that Labour is the **Cause** of **Value**.

Now if we simply refer to the table of Instances given above, it will be seen at once that there are multitudes of instances of Quantities which have Value in which there is no Labour at all. This at once shows that Labour is in no way essential to Value; but, as Whately said, it is only the **Accident** of Value.

Nevertheless, this fatal doctrine has obtained such a firm hold and has had such a baleful influence over English Economics: and has so especially obstructed the true apprehension of the principles of Credit, that we must give a more elaborate refutation of it.

The doctrine that Labour is the cause of all Value, which is entirely peculiar to English Economics, originated, as far as we are aware, with Locke. As this passage is but very little known, we shall make room for it, though rather long.

After alleging that the foundation of the right of appropriating portions of the earth and its products, by private persons, originated in the Labour they bestowed on them, he says²—

"Nor is it so strange as, perhaps, it might appear, that the property of Labour should overbalance the community of Land:

¹ *Nov. Org.* bk. ii. aph. 34.

² *Essay on Civil Government.*

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“An acre of land that bears here twenty bushels of wheat, and another in America, which with the same husbandry would do the like, are without doubt of the same natural intrinsic Value: but yet, the benefit mankind receives from one in a year is worth £5, and from the other probably worth a penny, if all the profit an Indian received from it were to be valued and sold here: at least, I may truly say, not one thousandth. It is Labour, then, which puts the greatest part of the value on land, without which it would scarcely be worth anything: it is to that we owe the greatest part of all its useful products: for all that the straw, bran, bread of that acre of wheat is more worth than the product of as good land which lies waste, is all the effect of Labour; for it is not barely the ploughman's pains, the reaper's and the thresher's toils, and the baker's sweat, is to be counted in the bread we eat: the Labour of those who broke the oxen, who digged and wrought the iron and stones, who felled and framed the timber employed about the plough, mill, oven, or any other utensils, which are a vast number, requisite to this corn, from its being seed to be sown to its being made bread, must all be charged to the account of Labour, and received as an effect of that: nature and the earth furnished only the almost worthless materials as in themselves. It would be a strange catalogue of things that industry provided and made use of about every loaf of bread before it came into our use, if we could trace them: iron, wood, leather, bark, timber, stone, brick, coal's, lime, cloth, dyeing, drugs, pitch, tar, masts, ropes, and the materials made use of in the ship that brought any of the commodities used by any of the workmen to any part of the work: all which it would be impossible, at least too long, to reckon up.”

We have given this extract at length, because it is probably the most elaborate Economical analysis of price of its time: and so far as we are aware, it is the first assertion that Value is due to human Labour. The answer to all its elaborate exposition is very simple. Notwithstanding all the Labour bestowed in obtaining these products from the earth, if there was no **Demand** for them, they would not be of any Value. Hence it is the **Want**, or **Desire**, for the products which **causes** Labour to be bestowed in producing them, and not the reverse. The doctrine that all Wealth is the produce of Land and Labour became very common among the jejune thinkers on Economics in the last century, from their ignorance of Jurisprudence and practical business.

The Economists restricted the term Wealth to the material products of the earth which are brought into commerce and

exchanged. Hence, according to this doctrine, Labour and Materiality were indispensably associated with Value: but they were not the **Cause** of Value; because unless these material products were exchanged, they had no Value: hence the Economists made **Exchangeability**, or **Demand**, the **Cause** of Value.

Adam Smith begins his work by describing Wealth as the “annual produce of land and labour”: but as he afterwards enumerates the natural and acquired abilities of the people as Fixed Capital: and Bank Notes and Bills of Exchange as Circulating Capital: he is quite self-contradictory: and he afterwards admits that Exchangeability is the real essence of Value.

Ricardo's work is a treatise on Value: but he begins by restricting his inquiry to things which are the produce of human labour: thus excluding about 80 per cent. of things of Value from his inquiry: and then he says that Labour is the foundation of all Value. But such a mode of reasoning is evidently futile and inadmissible.

Ricardo was an eminent member of the Stock Exchange. The Commodities he dealt in, which he bought and sold, were Public Securities of all sorts. Now if Ricardo held £100,000 worth of the British Funds, would he maintain that their value was due to Labour?

McCulloch, who is a mere copyist of Ricardo, also, in one place strenuously maintains that Labour is the Cause of all Value. He says¹—“Nature is not niggard nor parsimonious. Her rude products, powers, and capacities, are all offered gratuitously to man. She neither demands nor receives an equivalent for her favours. An object which may be appropriated or adapted to our use without any voluntary labour on our part, may be of the highest utility, but as it is the free gift of nature, it is quite impossible that it can have the slightest Value.”

Also — “In its natural state, matter is very rarely possessed of any immediate or direct utility, and is always destitute of Value. It is only through the labour expended in its appropriation, and in fitting and preparing it for being used, that matter acquires Exchangeable Value, and becomes Wealth.”

We shall afterwards show the absurd consequences of this doctrine: and show McCulloch's self-contradictions.

So also Carey, the American Economist, was infected with this doctrine, and says—“Labour is the sole Cause of all Value.”

¹ Introduction to *Adam Smith*.

Now it is impossible to stir a step in this subject until this contradiction is cleared up: and we determine whether **Labour** or **Exchangeability**, i.e., **Demand**, is the **Cause of Value**.

Examination of the Doctrine that Labour is the Cause of all Value.

II. We have now to apply the principles of the Baconian Induction to investigate the Doctrine that **Labour** is the sole **Cause**, or **Form**, of **Value**.

We may lay down this Lemma—

If Labour is the Sole Cause of Value, then whatsoever thing Labour has been bestowed upon must have Value.

For if there be two things which have been produced with equal amounts of Labour: and the one has Value, and the other not: or if a thing produced by Labour has Value in one place and not in others; or at some times and not at others; then there must be some other Cause of Value besides Labour: which is contrary to the hypothesis.

We will now examine some of the necessary consequences of the Doctrine that Labour is the Cause of all Value.

I. All Differences or Variations in Value must be due to Differences or Variations in Labour.

This is Locke's doctrine: but it is contrary to all experience: because there are many material things upon which no Labour was ever bestowed, which yet have very great Value: and also very great differences of Value.

The space of ground upon which a great City like London is built has enormous Value: but this space of ground is in no way the product of Labour.

Land near the Bank of England has often been sold at the rate of £2,000,000 an acre: quite exclusive of any buildings on it: how is this land the product of Labour?

As we recede from the centre the Value of land rapidly diminishes: at the present time the value of land at Charing Cross is said to be £600,000 an acre: but in the suburbs of London it is far less.

Moreover, land in the same locality has very different Values.

A frontage in a main thoroughfare like Cheapside, Fleet Street, the Strand, Cornhill, Oxford Street, Regent Street, is of

much greater Value than an equal space of ground in a back street.

How are these differences of Value due to differences of Labour: when, as we have seen, there never was any Labour at all bestowed on the land?

We read that the island of Manhattan, on which the City of New York is built, was originally purchased from the Indians for the sum of £5. What would be its value now? And yet the land remains just the same as ever it was. Within the last century immense cities have sprung up in what was then desert. Melbourne, Sydney, Adelaide, Chicago, and countless others, stand on ground which was then absolutely worthless. In each of these the land is now of enormous Value. Now is its Value due to Labour?

The title deeds of the land on which the City of Melbourne now stands are in the British Museum. The purchase money of the land was 20 pairs of blankets, 30 tomahawks, 100 knives, 50 pairs of scissors, 30 looking glasses, 100 handkerchiefs, 100 pounds of flour, and 6 shirts. Besides these, there was reserved an annual rent of 100 pairs of blankets, 100 knives, 100 tomahawks 50 suits of clothing, 50 looking glasses, 50 pairs of scissors, and five tons of flour. This was the price in 1835 of 500,000 acres of land: some of which sold at one time for £500,000 an acre: and recently some of it brought £2,000 the square foot.

If the augmented Value is due to Labour bestowed upon it, a diminution in the Value of land must be due to Labour subtracted from it. But how is this possible?

As the tide of fashion, population, and Wealth flows towards a locality, the ground rises rapidly in Value: whereas when a locality is deserted by wealth and population the Value of land rapidly diminishes. How are these changes in the Value of land due to variations in Labour: when, as we have seen, these spaces of ground are not the result of Labour at all? I know of a shop in a suburb of London which fifty years ago let for £50: at the present day that very same shop lets for £250. How can this change of Value be due to Labour, when this shop stands exactly the same as it did fifty years ago?

The ground in the centre of London, Paris, Berlin, Vienna, and countless other cities, has enormous Value. There are numerous other places now desolate and lonely which were once the sites of great cities.

Memphis, Babylon, Nineveh, were once great cities: when the chariots and the horsemen were pouring forth in multitudes from

much greater than in other parts of the world. How are these differences of value due to a difference of labour when, as we have seen, there never was any labour at all on the land?

We find that the value of Manhattan is not the same as that of New York is that the quantity contained in the same piece of land is not the same as that in other parts of the world. Just the same as that in other parts of the world. Cities have sprung up in various parts of the world. Accidents of nature and human industry have made it so. Was there any labour at all in the creation of these cities? enormous value. But it is not labour that has created them.

The city of London is a great example of this. It is not labour that has created it. It is the result of a long process of accumulation. The land was first cultivated by the Romans. Then the Saxons came. Then the Normans. Then the Tudors. Then the Stuarts. Then the Hanoverians. Each of these dynasties has added to the value of the land. But it is not labour that has created it. It is the result of a long process of accumulation.

If the accumulation of value is not the result of labour, what is it the result of? It is the result of the power of the land to produce. The land is a source of wealth. It is a source of power. It is a source of life. It is a source of all that we need. It is a source of all that we want. It is a source of all that we have.

As the value of the land increases, the power of the land to produce increases. The land is a source of wealth. It is a source of power. It is a source of life. It is a source of all that we need. It is a source of all that we want. It is a source of all that we have.

variations in labour. What is the result of these variations? They are not the result of labour. They are the result of the power of the land to produce. The land is a source of wealth. It is a source of power. It is a source of life. It is a source of all that we need. It is a source of all that we want. It is a source of all that we have.

of London which is the same as that of New York. It is the result of a long process of accumulation. The land was first cultivated by the Romans. Then the Saxons came. Then the Normans. Then the Tudors. Then the Stuarts. Then the Hanoverians. Each of these dynasties has added to the value of the land. But it is not labour that has created it. It is the result of a long process of accumulation.

very same shop as it was fifty years ago? It is the result of a long process of accumulation. The land was first cultivated by the Romans. Then the Saxons came. Then the Normans. Then the Tudors. Then the Stuarts. Then the Hanoverians. Each of these dynasties has added to the value of the land. But it is not labour that has created it. It is the result of a long process of accumulation.

the hundred-gated Thebes, the land in it must assuredly have had very great Value. So with numberless other places. Where is their Value now? Yet the ground remains exactly the same as ever it was. Is this diminution in Value due to the subtraction of Labour? If London, Paris, Berlin, and Vienna should ever come to be as Nineveh, Babylon, Memphis, and Thebes are to-day, where would the Value of the land be on which once they stood? When the future Belzoni or Layard comes from New Zealand to sketch the ruins of St. Paul's from a broken arch of London Bridge, will the ground near what was once the Royal Exchange sell for £70 the square foot?

When a fair is held near a town, persons pay a good rent for leave to erect booths and tents on the Common. Thus at these times, the land acquires Value. At other times they would pay nothing: and the land would have no Value. Therefore the simple space of ground has Value at one time, and not at another. How can the changes in the Value of the land be due to changes in Labour, when the ground remains exactly as it was?

McCulloch's doctrine that no natural product has Value until Labour has been bestowed upon it: and that it is the Labour of appropriating it which gives it Value: is refuted by the plainest experience.

Suppose a miner has the good fortune to find a diamond weighing 400 carats on the surface of the ground, would it have no Value? And is it the Labour of appropriating it that gives it its Value?

Again, Diamonds have very different degrees of Value, according to their purity and freedom from blemishes. How can these differences of Value be due to differences of Labour, when the diamonds are not the creation of Labour at all?

Suppose that another person finds a nugget of gold weighing 400 ounces, has it no Value? And is it the Labour of picking it up which gives it its Value?

The proprietor of a coal mine, or a marble quarry, demands and receives a price for the coal and the marble as they exist in the mine, or the quarry, before a human being has touched them, or even seen them.

The Government founds a new Colony, and takes possession of the land; it is quite usual to demand a price, or a rent, for the land, which no person ever touched. How is its Value due to Labour?

In the Midland counties of England there are many oak trees

which would sell for £60 or £100, as they stand upon the ground. They were, perhaps, self-sown; no person, perhaps, ever bestowed so much Labour upon them as even to sow the acorn from which they grew. How is the Value of such oak trees due to Labour?

But the very same oak trees in the centre of a forest in an uninhabited country would have no Value at all. How are these differences of Value due to Labour?

It is said that in 1810 an oak tree was cut down at Gelenas, in Monmouthshire, whose bark sold for £240, and the wood for £670: how was the Value of the bark and the wood due to Labour?

Near these oak trees there may, perhaps, be growing other trees—beeches, elms, ashes—of the same size. It is well known that these trees do not have the same Value as oaks. How are the differences of Value of these different trees due to Labour?

It is a common resource of gentlemen who are embarrassed to sell the timber on their estates. And this timber often realises very many thousands of pounds. How is the value of this timber due to Labour?

A large meteoric stone fell in Scania. It was acquired by Baron Nordenskiöld for the sum of £84, for the national museum.¹ How was the value of this *aërolite* due to Labour?

There are again cattle, flocks, and herds of all sorts. They increase and multiply by the agency of nature. How is their Value due to Labour?

Some time ago a large whale was stranded in the Firth of Forth: it sold as it lay on the beach for £70: no human being touched it: how was its Value due to Labour?

Mr. Buckland says—"When examining the cast-off skins of the snakes at the Zoological Gardens, we observed some white-looking substance in a box. This is the *dejecta* of the snakes. It is a perfectly white substance, looking very like plaster of Paris, and is composed of very nearly pure uric acid. It is bought by a doctor (I imagine a chemist) for the high price of nine shillings a pound." Is the value of the *excreta* of snakes due to human Labour?

Some years ago, when it was the fashion for European ladies to pile huge masses of hair, termed chignons, on their heads, in imitation of their swarthy sisters of Central Africa, it was not uncommon for a girl's hair to sell for £5, £10, £20, and even sometimes for £50. Was the Value of the girl's hair due to Labour?

¹ *Nature*, June 20, 1889.

It is stated in a French paper that at Merlans, in the department of the Lower Pyrenees, there is a regular market for girls' hair, held every second Friday, which is attended by hundreds of hair-dressers. Ordinary hair does not go for much—three to twenty francs a head. But for pure white hair there is an immense demand; and it sells from £15 to £20 an ounce. There is no market for ordinary grey hair. Now, is the Value of the pure white hair due to Labour? And is the difference in price between pure white hair and ordinary hair due to differences in Labour?

II. *If Labour be the Sole Cause of Value, then all things produced by Equal Quantities of Labour must be of Equal Value.*

But this doctrine is contrary to all experience.

If it were true, a diamond and the rubbish it is found in ought to be of Equal Value: so a pearl and its shell ought to be of Equal Value. If a lump of gold and a lump of clay were obtained by equal Quantities of Labour, they ought to be of equal Value.

If a sportsman were to shoot a pheasant with one barrel, and a crow with the other, the pheasant and the crow ought to be of equal Value. Or if a fisherman were to catch a salmon and a dogfish in the same net, the salmon and the dogfish ought to be of equal Value.

And similar cases might be multiplied to any extent.

Hence, we have products obtained by exactly the same Quantities of Labour: some of which have Value, and others not: which decisively proves that Labour cannot be the Sole Cause of Value.

III. *If Labour is the Sole Cause of Value: then the Value must be Proportional to the Labour.*

But this doctrine is contrary to the most manifest experience.

Suppose that a gold digger, by good luck, finds a nugget of gold lying on the surface of the ground: and another digger finds a similar nugget at the end of a week's Labour: another finds a similar nugget at the end of a month's Labour: another finds a similar nugget at the end of six months' Labour: another finds a similar nugget at the end of a year's Labour: then according to this doctrine, the nugget found by the expenditure of a year's Labour ought to be immensely more valuable than the nugget picked up without Labour: and the other nuggets ought to have Value in proportion to the Labour they cost. But every one of common sense knows that such a doctrine is wholly fallacious. All the nuggets would have

exactly equal Value notwithstanding that they were obtained by very different Quantities of Labour.

So with diamonds: suppose that a miner by good luck found a magnificent diamond directly he began to work: and suppose that after lengthened toil he found a very small one: then the small diamond ought to be many times more valuable than the large one.

So when different quantities of wheat mingle in the same market, brought from all different countries of the world: their general Value is determined solely by the Law of Supply and Demand. But wheat of a superior quality bears a higher price than wheat of an inferior quality: without the slightest reference to its cost of production. We saw it stated in a paper that when wheat from Manitoba was brought into the Liverpool market, it was at once priced 3d. per hundred pounds higher than the best Californian wheat. This was due simply to its superior quality: and had nothing to do with cost of production.

And numerous other cases of a similar nature might be cited.

IV. *If Labour be the Sole Cause of Value, a thing produced by Labour must Always have Value, and the Same Value.*

But this is notoriously contrary to experience.

As the author of the *Eryxias* showed that the same thing may have Value in one place and not in another: and at one time and not at another.

A bag of sovereigns has great Value in London: but take them among the Eskimos, and where would their Value be?

A professor of Greek, Latin, or Mathematics, may find his acquirements of great Value in the Universities where there are many students demanding instruction: but of what Value would they be among the Patagonians?

A great Lawyer finds his eloquence, his knowledge, and his skill of great value in the Royal Courts of Justice, but of what Value would they be among the Hottentots? Even in London itself a man may have the most splendid acquirements, but if no one employ him, where is their Value? If a man had all the medical skill and knowledge in the world from Hippocrates and Galen to Copland, and no one was ill, where would the Value of it be to him? If an author were to publish the most learned and laborious works in the world, and no one would buy them, where would their Value be to him?

To say that Labour is the sole Cause of Value, is to say that an

isolated thing can have Value; whereas Value is always relative, and can only arise in society.

If a man were cast on a desert island, and had twenty hogs-heads full of sovereigns, of what possible Value could they be to him?

If any one were to set up a manufactory of watches, or grow fields of corn in the centre of Australia, where there is no demand for watches or for corn, where would their Value be?

Moreover, if Labour be the sole cause of Value, if a thing is once produced by Labour, its value can never vary, which is Ricardo's express doctrine. But this is contrary to all experience. Because after things have been produced, and all Labour upon them has been ended, they constantly vary in their Value from day to day, from month to month, and from year to year.

Thus pictures by one master constantly rise in Value, and pictures by another master fall in Value, long after the hand which has produced them lies cold in the grave. The pictures themselves remain exactly the same; it is the Taste, *i.e.* the Demand of the public, which varies.

Ricardo maintains that the same Labour in manufactures always produces the same Value.

In the reign of George III. there was a very widespread fashion to wear steel shoe-buckles; this manufacture employed a large number of persons. All of a sudden these steel buckles went out of fashion, the demand totally ceased, and the people employed in making them were thrown into the direst distress. But according to Ricardo, the buckles were of the same Value, when there was a demand for them, and when there was none! According to Ricardo, the way to alleviate the distress of the people was for them to go on manufacturing shoe-buckles for which there was no demand.

Some years ago the fashion of ladies wearing straw bonnets suddenly went out, and the manufacturers of them at Luton, Dunstable, &c., were thrown into the direst distress. But according to Ricardo, the straw bonnets were exactly of the same Value, whether there was a demand for them or not.

According to Ricardo, if the warehouses of Manchester were groaning with goods, the produce of Labour, they would be exactly of the same Value, whether there was a demand for them or not. We doubt whether the manufacturers of Manchester would acquiesce in this doctrine.

Now with respect to the second Order of Economic Quantities,

namely, Immaterial Property, which includes all kinds of Labour, one simple question will suffice—

If Labour is the Sole Cause of Value, what is the Cause of the Value of Labour?

Labourers of all kinds know only too feelingly the bitter mockery of the doctrine that Labour is the Cause of Value, when often and often it happens that thousands and thousands of them are only too willing to sell their Labour, when there is no one to buy it. But, according to Ricardo, their Labour is of exactly the same Value to them, whether there is any demand for it or not.

With respect to the third order of Economic Quantities, namely, Incorporeal Quantities, or Abstract Rights, there are some kinds which are, no doubt, associated with Labour, such as Copyrights, Patents, and the Goodwill of a business.

But the same remark applies to them as to material objects, with which Labour is associated, that Labour cannot be the Cause of their Value.

If a person bestows an enormous amount of Labour in preparing and publishing a work, the Law, of course, may give him the Copyright, but if no one will buy the work, where is its Value?

So also with Patents; an inventor may bestow enormous Labour in perfecting the machine, but if no one will buy the machines, where is the Value of the Patent?

Besides, though persons may bestow Labour on the works or machines, it is the Law alone which creates the Copyright or the Patent; and where is the Labour in creating a Copyright or a Patent?

No persons know more feelingly than authors and inventors that Labour is in no way necessarily the Cause of Value.

But there are vast masses of Incorporeal Property which have Value, which are not associated with Labour at all.

Thus a person who held a large amount of the Funds would be a wealthy man: the Funds have Value. But where is the Labour bestowed on them?

Mill himself allows that a promise to pay by a solvent banker or merchant is of exactly the same Value as the gold itself; which of course it is, because the gold is the Value of the promise. But how is the Value of the promise, or the Credit, due to Labour? And the whole mass of circulating Credits or Debts (supposed sound) are of exactly the same value as an equal quantity of Gold. How is the Value of this mass of circulating Credits, or Debts, due to Labour? The quantity of this mass of circulating

Credits, or Debts, in this country is colossal; it far exceeds any other single kind of property in the country, except the land.

The Bank of England stamps one piece of paper with a promise to pay £5; it stamps another piece of paper with a promise to pay £1000: the Value of one piece of Paper is £5, the Value of the other piece of paper is £1000: how is the difference in the Value of these two pieces of paper due to differences of Labour?

Thus we see the utter fallacy of the doctrine that Labour is necessary to Value: and that all Wealth is the produce of Land, Labour, and Capital.

Results of the preceding Inquiry.

12. We may now summarise the results of the preceding investigations: these are—

1. That there are vast quantities of property, both Corporeal and Incorporeal, which have Value, upon which no Labour was ever bestowed.
2. That Quantities, both Corporeal and Incorporeal, associated with Labour, may have no Value.
3. That the same quantity of Labour may produce products; some of which may have Value: and others no Value.
4. That quantities produced by varying quantities of Labour may have the same Value.
5. That things produced by Labour may have Value in some places, and not in others: and at some times, and not at others.
6. That things produced by less Labour may have more Value than things produced by more Labour.

From these indisputable propositions, the result of practical experience, the undeniable inference is that Labour is not in any way whatever the Form, or Cause of Value; or even necessary to Value: and in fact in this great commercial country the enormously greater amount of Valuable Property is not the result of Labour at all.

Now by the Laws of Inductive Philosophy, if we could find a single case of Value which is not the result of Labour: that single instance would alone be sufficient to overthrow the doctrine that Labour is the sole Cause of Value. But instead of one instance, there are multitudes: it is probable that not 20 per cent. of Valuable Quantities have anything to do with Labour.

In short, there never was any doctrine in science, which has received such a crushing and overwhelming overthrow, as that Labour is the

Cause of Value: and hence that system of Economics which founds its ideas of Wealth and Value on Labour, is utterly fallacious.

The pertinacity with which some writers still persist in maintaining that Labour is the Cause of all Value, contrary to the evidence of the most glaring facts, is a strong and striking instance of Bacon's aphorism¹—

"The human understanding when it has once adopted an opinion (as being either the received opinion, or as being agreeable to itself) draws all things else to support and agree with it. And though there be a greater number and weight of instances to be found on the other side, yet these it either neglects or despises, or else by some distinction sets aside and rejects: in order that by this great and pernicious pre-determination the authority of its former conclusions may remain inviolate

"But with far more subtlety does this mischief insinuate itself into philosophy and the sciences: in which the first conclusion colours and brings into conformity with itself all that come after, though far sounder and better. Besides, independently of that delight and vanity which I have described, it is the peculiar and perpetual error of the human intellect to be more moved and excited by affirmations than by negatives; whereas it ought properly to hold itself indifferently disposed towards both alike. *Indeed, in the establishment of any true axiom, the Negative instance is the more forcible of the two.*"

On Utility as the Cause of Value.

13. Seeing then that the doctrine that Labour is the Cause of Value is untenable, as every Economist of sense now sees, J. B. Say placed the Origin or Source of Value in **Utility**: although he has involved himself in many contradictions.

The doctrine that Utility is the Cause of Value is in some respects more specious than that Labour is the Cause of Value, because there are many things, like land, trees, cattle, &c., which are very useful, and have Value, which are not the result of Labour at all. But yet it is liable to the same fatal objections as that Labour is the Cause of Value: because it makes Value some Quality of the thing itself, absolute and inherent: as Say says²—
 "Sans que leur ~~utilité~~, leur Valeur intrinsèque, soit plus grande"—
 "Sa valeur, celle fondée sur son Utilité." Therefore Say makes

¹ *Nov. Org.* bk. i. aph. 46.

² *Traité*, pp. 58, 59.

the Utility of any object its **Intrinsic Value**: and therefore, of course, its Value cannot vary so long as its Quality remains the same.

Many of the arguments that show that Labour is not the Cause of Value, equally show that Utility is not the Cause of Value.

The doctrine that Utility is the Cause of Value is more specious in this respect: that for a thing to be useful it must be useful to some **Person**. But then there is this fatal defect in it, that things may be very useful, and yet have no Value. When Robinson Crusoe was in his desert island he had many things that were useful, but they had no Value, because he could not exchange them away. As the Economists pointed out, Value is a quality which only arises in society. Moreover, in Communistic societies, where persons work in common, and the products are divided among the community, there may be things of great Utility, but they have no Value, because there are no exchanges. Value, as J. B. Say himself says, only arises out of an exchange.

Besides if Utility is the cause of Value, the object must always have the same Value while its Quality remains the same. But while the Quality remains the same, the same thing may be useful in some places and not in others: and at some times and not at others: and to some persons and not to others. Some persons smoke, others abhor tobacco: tobacco has Utility for those who smoke, it has none for those who do not. Some persons drink wine, others wholly abstain from it. Wine has Utility for the former, and none for the latter: the wine itself remaining the same. When persons are ill, drugs have great Utility: when persons are well, drugs have no Utility, but the drugs themselves remain the same. A tureen of train oil would be a great delicacy and highly prized among the Eskimos, but it would probably not have the same value at the Lord Mayor's dinner. And it would be easy to multiply instances to any amount of things being useful to some persons, and not to others: and in some places, and not in others: and at some times, and not at others: the things themselves remaining exactly the same.

Again, if Utility be the Cause of Value, things ought to be valuable in exact proportion to their Utility. But this is contrary to the plainest experience: because, however useful a thing may be, it may be so abundant as to have no, or at least an extremely small, Value. A familiar example of this is Water, which is of the very greatest Utility: but it is so abundant that it has no value: or at least none except what is paid as water rates. But in times of great scarcity,

as in a besieged town, water may acquire a very high Value. So the air we breathe, which is very useful and indispensable to life, costs nothing, because we can have as much as we please of it. And this might be developed to a great extent.

Again, things of no Utility may have enormous Value: such as diamonds: and, indeed, instances of this are so numerous, and have been so often quoted, that it is superfluous to cite them.

To show how utterly futile it is to make Utility the cause or measure of Value, we may take these examples among countless others. A horn spoon is quite as *useful* as a golden spoon. But is it as *valuable*? A silver spoon is quite as *useful* as a golden spoon, but is it as *valuable*? A linsey wolsey, or serge dress is quite as *useful* as one made of Genoa velvet, or of brocaded silk, but is it as *valuable*?

Very slight reflection will show that Utility is so vague an expression that it cannot be made the basis of Value. But there are also a great many things which have Value, to which it would be a great debasement of the word Utility to apply it to them at all. The depraved tastes and licentious appetites of too large a portion of mankind confer a Value upon things of the most detestable nature. It requires the sternest rigour of the law to put down the sale of obscene pictures and books. While there is a demand for such things, and persons will buy them, they undoubtedly have Value, and are Wealth, equally as the most excellent things. But surely no one would debase the word Utility by applying it to such masses of abomination. But while this continues no Economist can refuse to class them as Wealth.

Demand is the Sole Cause of Value.

14. It has now been shown that Materiality and Durability are in no way necessary to Value: but are only in some cases the accidents of Value. It has also been shown that **Labour** and **Utility** altogether fail to stand the tests of Inductive Logic as being the Cause of Value. What then remains? In what consists the essence of Value? The only thing which ancient writers, Aristotle, the author of the *Eryxias*, the Roman Jurists: and in modern times the Physiocrats, the Italian Economists, Smith, Condillac, Whately, and hosts of others have observed—**Exchangeability**. Each of the Quantities in the table of Instances may be bought and sold: or their value may be measured in money: each of them possesses the attribute of Exchangeability: and that is the sole attribute

which is common to all the classes of Quantities : and to each separate Quantity in each class. Hence, as the ancients unanimously held for 850 years, Exchangeability is the sole essence and principle of Wealth.

Thus, by strictly and reverently following the precepts of the mighty Master, by rejecting and excluding all accidental and intrusive ideas, we have at last obtained an **Affirmative** issue.

Now what is necessary in order that any quantity may be Exchangeable? Evidently that some one else should **Demand** it. If I offer something for sale, what is necessary that it should be sold? Simply that some one else should Desire, or Demand, it. It is therefore clear that **Demand** is the sole **Cause of Value**, or **Exchangeability**.

Aristotle said long ago that it is *χρεία*, or **Demand**, which binds society together: the author of the *Eryxias* over and over again points out that Demand is the sole Cause which constitutes anything Wealth: and that anything is Wealth, whatever its nature may be, so long as it is Wanted and Demanded: and no longer. He pointed out that the local Money of different states is only Wealth where it has power of purchase: where it has no power of purchase it is not Wealth.

It has been shown that the Greek word *χρῆμα*, which is one of the most usual words for Wealth, is derived from *χράομαι*, to want, or demand: and that *χρῆμα* simply means anything which is "Wanted and Demanded": and that things are only *χρήματα* where they are *χρήσιμα*, or wanted and demanded: and that where they are not *χρήσιμα*, they are not *χρήματα*.

Here it is quite evident that we have got to the Origin, Form, or Cause, of Value: it is **Demand** pure and simple. Value is not a Quality of an object: nor is it the Labour bestowed on obtaining it: *it is an Affection of the Mind*. The sole Origin, Form, or Cause, of Value is **Human Desire**. When there is a demand for things they have Value: when the Demand increases (the supply remaining the same), the Value increases: when the Demand decreases, the Value decreases: and when Demand altogether ceases, Value is altogether gone.

Boisguillebert, the morning star of Economics, saw this most clearly. He says¹—" *Consommation* (Consumption, or Demand) is the principle of all Wealth."—"All the revenues, or rather all the riches of the world, consist in *Consommation* (Demand): all the most exquisite fruits of the earth, and the most precious

¹ *Factum de la France*, ch. v.

products would be nothing but rubbish, if they were not *Consommes* (Demanded)."

The Italian Economists were very clear and consistent in showing that Human Wants and Desires are the sole Cause of all Value.

Genovesi clearly points out¹ that the words *prezzo*, *stima*, *valuta*, *valore*, are words of relation, and not absolute, and that they are not applied to Intrinsic Qualities. That though Money is the approximate measure, the ultimate measure to which not only things, but their Price is referred, is Man himself. Nothing has Value where there are no men, and the very things which have a less Value where men are few, have a very high Value where there are many people, which is the reason why things and services have a much higher Value in the Capital than in the provinces.

"Men, however, do not give Value to things and services unless they want them. Hence our wants are the first source of the Value of all things, and Price is the power to satisfy our wants."

Genovesi says that nothing has Value except in relation to these wants and demands. He shows how prices are always determined by Supply and Demand, and he says, "Value is the child of Demand."

So Beccaria says,² "**Value is a Substance** which measures the **Estimation** in which men hold things."

Verri shows³ that it is the wants of men which give rise to commerce, and as their wants increase so does commerce increase. Nations which increase their wants increase their power and their happiness. Desire, or Demand, incites men to commerce. Commerce increases Demand and abundance. Desire for the merchandise sought, and abundance to give in exchange for it; and as a nation progresses from the few and simple wants of the savage state to new wants and necessities, it must proportionately increase its annual production, so that it may have enough beyond its annual consumption to purchase foreign goods.

They then require something to ascertain the equality between what they give and what they receive. "**Value** is a word which denotes the **Estimation** which men make of a thing." Verri also shows that all variations in Price proceed from variations in Supply and Demand.

The Economists made all Value proceed from Demand; they

¹ *Lezioni di Economia Civile*, part ii. ch. i.

² *Del disordine e de' remedj delle monete nello stato di Milano*.

³ *Meditazioni sulla Economia Politica*.

showed that things which remain without *Consommation* (Demand) are without Value.

Condillac is very clear and explicit on this point.¹ He begins by investigating the foundation of the Value of things, and shows that it originates entirely from the wants and desires of men. Things which satisfy some want have utility, and this Want, or Estimation, is called Value.

“As people feel new wants they learn to make use of things which they did not before ; they give therefore Value at one time to things to which at other times they did not.”

Hence all Value resides in the **Mind**, and he says, “This Esteem is what is called Value,” and he shows that all variations in value proceed from variations in Supply and Demand.

We have now shown that all ideas of Labour, or Utility, as the Cause of Value, are erroneous, and must be rejected, and that **Demand** is the **Sole Cause of Value**.

Self-contradiction of those writers to whom is chiefly due the doctrine that Labour is the Cause of Value.

15. Even those writers to whom the doctrine that Labour is the Cause of Value is chiefly due, have flatly contradicted themselves. We have already pointed out the fallacy of Locke's doctrine. Smith, who at the beginning of his work fills the minds of his readers with the notion that Labour is the Cause of Value, and that all Wealth is the product of Land and Labour, says² that the vine “is more affected by the difference of soils than any other fruit tree (?). From some it derives a flavour which no culture or management can equal, it is supposed, on any other. This flavour, real or imaginary, is sometimes peculiar to the produce of a few vineyards : sometimes it extends through the greater part of a large province. The whole quantity of such wine that is brought to market falls short of the effectual demand, or the demand of those who would be willing to pay the whole rent, profit, and wages necessary for preparing and bringing it thither according to the ordinary rate at which they are paid on common vineyards. The whole quantity therefore can be disposed of to those who are willing to pay more, which necessarily raises the price above that of common wine. The difference is greater or less, according as the fashionableness or scarcity render the competition of the buyers more or less eager.

¹ *Le Commerce et le Gouvernement*, ch. i.

² *Wealth of Nations*, bk. i. ch. ii.

Whatever it be, the greater part of it goes to the rent of the landlord. *For though such vineyards are in general more carefully cultivated than most others, the high price of the wine seems to be not so much the Effect as the Cause of the careful cultivation."*

The same cause which influences the quality of the wine is true of all other fruits.

Now this last sentence of Smith's is entirely antagonistic to the part of the work in which it occurs. Here he sees and acknowledges that it is *Value which is the Inducement to Labour*.

So also Ricardo, in combatting Malthus's Theory of Rent, says¹: "It is the rise in the Market Price of Corn which alone encourages production: for it may be laid down as a principle uniformly true, that the only great encouragement to the increased production of a commodity is its Market Value exceeding its Natural or Necessary Value."

So McCulloch, who is the abject bond slave of Ricardo, follows him in his gyrations. He says²—"Demand may therefore be considered as the ultimate **Source and Origin** of both **Exchangeable** and **Real Value**: for the desire of individuals to possess themselves of articles, or rather the **Demand** for them originating in that Desire, is the sole Cause of their being produced or appropriated."

Thus it is clearly seen that Smith, Ricardo, and McCulloch, who are the chief writers who have introduced that canker and plague-spot of English Economics that Labour is the **Cause** of Value, and that all Wealth is the product of Land, Labour, and Capital have most manifestly contradicted themselves, and have acknowledged that Demand is the sole **Cause** of Value: and that it is not Labour which is the cause of Value, but Value or Demand which is the Inducement to Labour.

We now, then, see that the true doctrine in Economics is that it is Value or Demand which is the Inducement to Labour. As the tribunes of the Commons said long ago³—

"Eo impendi Laborem ac periculum . . . magna præmia proponantur."

"Labour and danger are encountered . . . because great rewards are offered."

So says Hume—"Our passions" (*i.e.* Desires and Demands) "are the only Causes of Labour."

Condillac says—"A thing has not Value because it has cost

¹ *Principles of Political Economy*.

² *Principles of Political Economy*.

³ *Livy*, bk. iv. ch. 35.

much, as people suppose: but money is spent in producing it, because it has Value."

So Whately says—"In this as in so many other points in Political Economy, men are prone to confound Cause and Effect. It is not that pearls fetch a high price because men have dived for them: but, on the contrary, men dive for them because they fetch a high price."

So the famous Spanish Jesuit, Balthasar Gracian, says¹—"Demand is the measure of Value."

Demand confers Value on Things upon which no Labour was ever bestowed.

16. Labour itself has no Value unless there is a Demand for it: and the products of Labour have no Value unless there is a Demand for them. The Value of land arises solely from the Demand of men for its products. And as this Demand by the very physical constitution of men is permanent, the land is the source from which an annual revenue springs.

But the Demand of men for products of the Mind is equally permanent: hence each of the great professions, Law, Medicine, Surgery, Engineering, also Art and Literature, and others are great Estates, like the Land, each deriving its Value from one great common principle—the Wants and Demands of mankind for their products, and their willingness to pay for them; and as it is this Desire, or Demand, which calls them into existence and confers Value on them: so, a cessation of this Desire and the cessation of the willingness to pay for the products, would immediately annihilate their Value.

And as we have seen that however much Labour has been bestowed on a thing, it has no Value unless it is wanted and Demanded: so Demand confers Value on a thing, and constitutes it Wealth, although no labour was ever bestowed upon it.

Thus it is the Demand for the ground upon which a city is built that confers enormous Value on the ground, though no Labour was ever bestowed on it: and it is the greater Demand which gives very different Values to spaces of ground in the same locality.

It is Human Desire and Demand which alone constitutes the fruits of the earth, as well as cattle, and herds, and flocks: as also the various timber trees, oaks, beeches, elms, teak, mahogany, fir: **Wealth.**

¹ *Oráculo Manual*, § 229.

It is Demand which discriminates between the diamond and the rubbish it is found in : and between the pearl and its shell.

So a recent lively writer, describing the splendour of the houses in some of the remote country districts of Spain, says—"Houses and splendid furniture in such places are nearly **Valueless**, because there is no one to **hire** the former or to **buy** the latter."

So, as we have already seen, Senior, speaking of Personal Qualities as Wealth, says—"They may be rendered **Valueless** by any change in the custom of the country which shall destroy the Demand for his services."

This long investigation is not merely necessary to clear up the difficulties and perplexities into which ill-informed writers have thrown the theory of Credit: but it is of even far more consequence, as it strikes at the root of all the theories of the Socialists, who maintain that all Value is derived from Labour, which they expressly ground on the doctrines of Adam Smith and Ricardo, and upon which is based the whole of that chaos of incomprehensible jargon, Carl Marx's *Capital*.

Credits or Debts have Value because they will be paid in Money.

17. The importance and the bearing of this investigation on our present subject is obvious. For it is the fatal doctrine that **Labour** is the Cause of all Value : and that all Wealth is composed of the materials of the globe and the product of Land, Labour, and Capital, that is at the root of all the difficulty to apprehend the subject of Credit.

If it be laid down that Labour is necessary to all Value, how could the Notes of the Bank of England or any other Bank have Value? Or how could the Bills of a solvent merchant have Value?

Everyone knows that a Credit in a Bank or a Bank Note has Value, because the Bank will pay it in gold: a Bill on a solvent merchant has Value, because he will pay it in gold when it becomes due. And the gold with which the banker or merchant pays his Notes or Bills is their **Value**.

So Mill, who is a devotee of Ricardo, says¹—"An order or a Note of Hand, or Bill payable at sight, for an ounce of gold, while the Credit of the giver is unimpaired, is worth neither more nor less than the gold itself."

So Smith, Say, and Mill all class Bank Notes as under the head of Circulating Capital.

¹ *Principles of Political Economy*, bk. iii. ch. xii.

Smith himself acknowledges that if Money were not Exchangeable it would have no Value: as the author of the *Eryxias* showed.

We have already frequently shown that all Jurists class Rights of Action, whether written or unwritten, as Goods: Chattels: Commodities: Merchandise: which can be bought and sold like any materials, chattels, or like Money itself.

And this species of Goods, Chattels, Commodities, Merchandise, has Value for exactly the same reason that any other merchandise or Money has Value: because it is Exchangeable. Money has Value only because it is exchangeable for products and services: and Credits or Debts have Value because they are exchangeable for Money.

Thus we see that so long as ideas of Value are mixed up and ~~mixed~~ ^{mixed} on Labour, the subject is plunged into inextricable difficulties and contradictions. But as soon as we adopt Exchangeability as test of Value, and the sole essence and principle of Wealth, as the ancients unanimously did for 850 years, and modern Economists are at last coming to do, all difficulties and ~~obscurities~~ ^{obscurities} are cleared up and dispersed like a fog before the morning sun.

On the Error of the Expression Intrinsic Value.

~~It~~ We have now to say something about an expression which has been the cause of enormous confusion in Economics: which has been one of the chief stumbling-blocks in the apprehension of the subject of Credit, and which must be cleared away.

All ancient writers, as well as modern Economists until Adam Smith's deplorable confusion on the subject, clearly understood that the Value of anything is some other thing **External** to itself: and there is not to be found in any of them the slightest trace of any such confusion of ideas as the expression **Intrinsic Value**.

It is not easy to determine when the unfortunate expression Intrinsic Value came into use. But it seems to have arisen in this way: when unreflecting persons thought about Value they thought of the Quality of the thing which made it desirable: and they called that its Value. They therefore gradually began to speak of Intrinsic Value.

So long ago as 1696 an able writer, Barbon, pointed out the confusion which had arisen from mistaking the Absolute Qualities of an object for the quantity of things it would exchange for.

He says:¹ "There is nothing which troubles this controversy more than for want of distinguishing between Virtue and Value.

"Value is only the Price of things: and that can never be certain: because it must be there at all times and in all places of the same value: *therefore nothing can have an Intrinsic Value.*

"But things have an intrinsic Virtue in themselves, which in all things have the same Virtue: the loadstone to attract iron: and the several Qualities that belong to herbs and drugs: some purgative, some diuretical, &c. But these, though they have great Virtue, may be of small Value, or no Price, according to the place where they are plenty or scarce: as the red nettle, though it be of excellent Virtue to stop bleeding, yet it is a weed of no Value from its plenty. And so are spices and drugs in their native soil of no Value, but as common shrubs and weeds: but with us of great Value: and yet in both places of the same excellent Intrinsic Virtue. . . .

"For these have no Value in themselves: it is opinion and fashion brings them into use and gives them a Value."

Barbon thus entirely refutes by anticipation the doctrine that Utility is the cause of Value, which has become rather common in the present day: and puts his finger on the phrase which has caused so much confusion in current Economics—Intrinsic Value—which is to confound an **Intrinsic Quality** with an **External Relation**.

The following passage from Senior shows how easily even able men are beguiled into the error. He says²—"We have already stated that we use the word Value in its popular (?) acceptation, as signifying that Quality in anything which fits it to be given and received in exchange: or, in other words, to be lent or sold, hired or purchased.

"So defined Value denotes a Relation reciprocally existing between two objects."

Now the Quality of a melon which fits it to be sold is its agreeable flavour: its flavour therefore, according to Senior, is its Value (!): and so defined, he says it means that it costs 5s. ! That is, he defines the Quality of the melon to be its Price !

This is exactly the confusion which the Economists so carefully provided against. The Quality which makes a thing desirable is its *Value in use*, or its Utility: and the Economists repeatedly explained that Economics has nothing to do with *Value in*

¹ *A Discourse concerning coining the New Money lighter*, p. 6.

² *Political Economy*, p. 13.

use, or Utility: but only with *Value in exchange*, or Market Price.

Smith, however, is chiefly responsible for the confusion on the subject in modern times. He begins by defining the Value of a thing to be any other Quantity it can purchase—to be something external to itself: and, therefore, that its Value increases or decreases, according as it can purchase more or less of that external thing.

He then suddenly changes his idea of Value, and defines it to be the Quantity of Labour expended in obtaining the object itself. Thus the Quantity of Labour expended in obtaining the object itself, came to be held to be its Value: and then Value came to be called Intrinsic.

This unhappy phrase, Intrinsic Value, meets us at every turn in modern Economics: and yet the slightest reflection will show that to define Value to be something external to a Quantity, and then to be constantly speaking of Intrinsic Value, are inconsistent and self-contradictory ideas.

Thus over and over again it is said that Money has Intrinsic Value: but that a Bank Note, or a Bill of Exchange, are only representatives of Value.

Money, no doubt, is the produce of Labour; but Smith himself says that if Money would exchange for nothing it would have no Value; so he admits that Exchangeability is the real essence of Value.

How, then, can the Value of Money be Intrinsic? How can anything have Intrinsic Value unless it has the thing it will exchange for inside itself? Money will exchange for anything—lands, houses, corn, books, wine, jewellery, &c.; and each of these is *a* Value of Money; but which of these is its Intrinsic Value?

Money remains exactly the same in itself wherever it may be placed; a hogshead full of sovereigns has immense Value in the middle of London, but if a person had it by itself in a deserted ship in the middle of the Atlantic, or in a barren island, where would its Value be? Yet if it has Intrinsic Value in one place it must have it equally in any other place.

A Bank Note payable on demand is of the Value of Money: and why is it so? Simply because it is exchangeable for Money. Hence a Bank Note has Value for exactly the same reason that Money has; namely, because it is exchangeable for something else. Credit is the Right to demand Money; and Money is the Right to demand products and services. Socrates, in the *Eryxias*, shows that

it is only when and where that Money can be exchanged that it has Value; when and where it cannot be exchanged it has no Value. So when a Bank Note or a Bill of Exchange can be exchanged, it has Value; when it cannot be exchanged it has no Value.

Hence the Value of Money and Credits of all sorts is essentially of the same nature; though there may be different degrees of it. A Credit, by the unanimous consent of all Jurists, Economists, and Merchants, is an article of Merchandise, and an exchangeable Commodity, just like Money, or any other material Chattel; and this whether it exists only in the abstract form of a mere Right, or whether it be recorded on Paper.

The expression, Intrinsic Value, is so common that persons are apt to overlook its incongruity of idea. It is, however, a plain contradiction in terms; and if we use words of a similar import whose meaning has not been so corrupted in popular usage, its absurdity will be apparent at once.

Thus, who ever heard of Intrinsic Distance, or of an Intrinsic Ratio? The absurdity of these expressions is apparent at once; but they are not a whit more absurd than Intrinsic Value. If we speak of the Intrinsic Value of Money, we may just as well speak of the Intrinsic Distance of St. Paul's, or the Intrinsic Ratio of five.

To say that Money has Intrinsic Value because it is material and the produce of Labour; and that a Bank Note, or a Bill of Exchange, is only the Representative of Value; is just as absurd as to say that a wooden yard measure is Intrinsic Distance; and that the distance between two points, one yard apart, is only the Representative of Distance.

A Standard of Value is Impossible.

19. That unfortunate confusion of ideas between Value being the Quantity of any other Commodity which any Quantity will purchase, and the Quantity of Labour embodied as it were in the thing itself, which is chiefly due to Smith and Ricardo, has not only led to that mischievous expression, Intrinsic Value, the source of endless confusion in Economics, but also to the search for something which the very slightest reflection would have shown to be impossible in the very nature of things—namely, an **Invariable Standard of Value**.

It is as well to explain what those Economists mean who are searching for an Invariable Standard of Value.

If we had a British yard and any foreign measures of length before

us, we could at once perceive the difference between them ; and if we were told the measurement of any foreign buildings, however remote in age or country, in foreign measures, we could by a very simple calculation reduce them to the standard of British measurement, and compare them with the size of our own buildings.

Those Economists who want an Invariable Standard of Value want to discover and fix upon some single commodity by which they can compare the Value of other things in all ages and countries.

But the least reflection will show that such a Standard is impossible in the very nature of things.

Money indeed is termed the Measure of Value ; and so it is in exchanges which are effected at the same time and place. If we are told that a quarter of corn is worth 4os., and that a sheep is worth 4os. at a certain time and place ; we should say that they were then and there of equal value.

But such matters are not the result of simple perception by the senses, as are the different measures of length and capacity. If a quantity of gold were placed beside a number of other things, no human sense could discern what their Value would be. And the most violent changes in their several Values might take place in the market, without their being any visible sign of such a thing. Value is a **Mental Affection** ; and Values are not perceptible by ocular inspection, but they must be declared by the communication of minds.

Moreover, it is not possible to ascertain the different Values of different Quantities of Gold obtained in different ages and countries. If a quantity of gold coin minted in the age of Augustus, an equal quantity minted in the reign of Elizabeth, and an equal quantity minted in China, were placed side by side, what human sense could discern the difference in Value between them ? And yet, that is what those Economists require who want an **Invariable Standard of Value**. They want something by which they can at once decide whether Gold is of more Value in A.D. 30 ; in A.D. 1588 ; or in A.D. 1893 ; in Italy, in England, or in China ; without reference to anything else ; just as we can discern the difference between British and Foreign measures by laying them side by side.

But the only test of Value is an Exchange, and unless we can effect an Exchange, there can be no Value. How can we exchange an ounce of gold in the year A.D. 193 with one in the year A.D. 1593. or with one in the year A.D. 1893 ?

Bailey well says¹—"Value is the relation between *contemporary* commodities, because such only admit of being exchanged with each other; and if we compare the Value of a commodity at one time with its Value at another, it is only a comparison of the relation in which it stood at these different times to some other commodity. It is not a comparison of some intrinsic independent quality at one period, with the same Quality at another period, but a **Comparison of Ratios**, or a comparison of the relative Quantities in which commodities exchanged for each other at two different epochs. If a commodity A in the year 100 was worth 2 B, and in 1800 was worth 4 B, we should say that A had doubled its Value to B. But this, which is the only comparison we could institute, would not give us any relation between A in 100 and A in 1800; it would simply be a comparison between A and B in each of these years.

"It is impossible for a direct ratio of Value to exist between A in 100 and A in 1800; just as it is impossible for the relation of distance to exist between the sun at the former period and the sun at the latter period."

The fact is that all this search after the impossible arose from Smith's unfortunate idea that the Value of a thing is the Quantity of Labour bestowed on obtaining it; which was also adopted by Ricardo.

From this idea it followed that if any commodity could always be obtained with an invariable Quantity of Labour it would be an Invariable Standard of Value.

Ricardo admitted that there is no commodity which is always obtained with an invariable Quantity of Labour; and therefore for that reason alone he admitted that an Invariable Standard of Value is unattainable.

An Invariable Standard of Value, however, is not only unattainable for the reason given by Ricardo, but it is in itself absolutely impossible by the very nature of things. Because **Value** is a **Ratio**, and a **Single Quantity cannot be the Measure of a Ratio**.

A measure of length or capacity is a single Quantity, and can measure other single Quantities, such as different lengths, or bodies of capacity. But Value is a Ratio, or a Relation; and it is utterly impossible in the very nature of things that a single Quantity can measure a Ratio, or a Relation.

It is impossible to say that $a : b :: x$. It is manifestly absurd to

¹ *On Value*, p. 72.

say that 4 is to 5 as 8, without saying as 8 is to what ; just as it is absurd to say that a horse gallops at the rate of 20 miles, without saying in what time.

But there may be a Measure of Value.

20. But though a Standard of Value is impossible by the very nature of things, there may be a **Measure of Value**.

Value being an Affection of the Mind, or the Desire or Demand of a person to acquire some object ; the Quantity of Money he is willing to give to acquire it is the Measure of his Desire to obtain it, and therefore the **Measure** of his **Value** for it.

But Credit is also equally a Measure of Value, as well as Money. Neither a merchant nor any one else will give more in Credit, which he is bound to redeem in Money, to acquire any commodity, than he would give in Money itself. But if he wants anything, he will give just as much in Credit as he would in Money. Hence Credit is equally a Measure of Value, or Desire, with Money.

Hence Money and Credit are the Measure of Value ; and as it is universally admitted by all Economists that purchases with Credit affect prices in all respects equally with Money, it follows that the aggregate of Money and Credit is the Medium in which Prices are measured, and that the aggregate of Money and Credit constitutes the Circulating Medium, or Currency.

Value exists only in the Human Mind.

21. Value, then, like Colour, Sound, and Odour, exists only in the Human Mind. There is neither Colour, nor Sound, nor Odour in external nature : they exist only in the Human Mind.

According to the unanimous doctrine of ancient writers and all foreign Economists, Demand is the sole Origin, Form, or Cause of Value. It is Demand, or Consumption, and not Labour, which gives value to a product. It is not the Labour which gives Value to the product, but the Demand for the product which gives Value to the Labour.

Hence it is not Labour which is the Cause of Value, but Value which is the inducement to Labour. It is not the Labour of the Producer which constitutes a thing Wealth, but the Demand of the Consumer.

We conclude, then, that it is not Labour, but Consumption, Exchange, or Demand, which constitutes a thing Wealth: and we trace the progress of a nation in wealth, according as their wants and desires increase and multiply. First, the demand for the sustenance required by the body gives Value to the material products of the earth, food, clothing, shelter, fuel., Then, as their tastes become cultivated and refined, arises the demand for works of literature, art and science: for painting, for sculpture, for architecture, for the drama, for music. And those who minister to these wants of the mind become wealthy, just as those who minister to the wants of the body do. It is the demand of the public alone which makes these things Wealth. Hence, in order to be wealthy, a people must be inspired with strong and various desires, and be willing to work to gratify those desires. And this shows the great importance, in an Economical point of view, of national education. Heavy taxes can alone be borne by an industrious and wealthy people, and the multiplication of wants and desires multiplies industry, multiplies Capital, multiplies incomes, multiplies the numbers of persons able to bear the burden of taxation, and renders the nation capable of great achievements, and of taking a leading position in the councils of the world.

SECTION III.

On the General Law of Value, or the General Equation of Economics.

22. The last branch of our inquiry is to discover the General Law of Value, or the General Equation of Economics. That is, to discover a Single General Law which governs the Exchangeable Relations of all Quantities whatever their nature may be, at all times, and in all places.

The acknowledged principles of Natural Philosophy show that there can be only **One** General Law of Value, or a Single General Equation of Economics.

We have shown that there are three distinct Orders of Economic Quantities, and we have generalised all the Fundamental Concepts of Economics so as to grasp all these Quantities.

These three Orders of Quantities can be exchanged in **Six** different ways. Our present inquiry is to investigate a Single General Equation which shall govern all these six species of exchanges indifferently.

Suppose that we make £ the general symbol of an Economic Quantity, *i.e.* of anything whatever which can be bought and sold or exchanged, or whose Value can be measured in Money, or which has purchasing power—and representing these various Quantities under the general symbol £, we may say that there are in every country Quantities of this sort—

£459,621,340
£278,234,500
£826,342,784
&c., &c., &c.

Now we affirm by virtue of the great principle of the *Continuity of Science*, and of the great Algebraical doctrine of the *Permanence of Equivalent Forms*, that whatever can be proved to be true Economically of any one of this series of Quantities must be true of them all.

Now looking at the series of Quantities placed above, who could tell of what species they are? Some may be land: some houses: some corn: some timber: some cattle: some jewellery: some money: some labour of different sorts: some credit or debts: some the funds: or other public obligations: some copyrights: some patents: some shares in commercial companies, &c.

Now as we have shewn that Materiality, Permanence, and Labour are only accidentally associated in some cases with Economic Quantities, and not with all: and that Exchangeability is the only Quality which is common to all Economic Quantities: it follows that Materiality, Permanence, and Labour must be excluded from any General Concept of an Economic Quantity: and Exchangeability retained as its sole general Quality.

Having thus obtained these Independent Economic Quantities, the whole purpose and object of the Science is to discover the Single General Law which governs the variations of their Exchangeable Relations.

It is clear that by the principle of the *Continuity of Science*, and the analogy of all Physical Sciences, however varied and complicated the different phenomena of Value may be: there can, by no possibility, be more than **One General Law of Value**: or a single General Equation of Economics: whatever it may be.

Fundamental Conditions of the General Equation of Economics.

23. Now, let A and B be any two Quantities whatever supposed perfectly general: it is quite clear that their Exchangeable Relations are contained within the following limits—

$$\infty A = 0 B$$

$$\&c. = \&c.$$

$$2 A = B$$

$$A = B$$

$$A = 2 B$$

$$\&c. = \&c.$$

$$0 A = \infty B$$

The meaning of which is simply this—Let the Exchangeable Relation between A and B gradually and continuously change from where the greatest possible Quantity of A will exchange for the least possible Quantity of B: to where the least possible Quantity of A will exchange for the greatest possible Quantity of B.

Now the *Law of Continuity* says that a Quantity cannot pass from one amount to another by any change of conditions without passing through all intermediate degrees of magnitude according to the intermediate conditions.

Hence, we affirm by virtue of the *Law of Continuity*—

1. *That if it can be indubitably proved that Any particular Law is true at any One point in the range of Prices: that same Law must be necessarily true at All points throughout the whole range of Prices.*

2. *That as the symbols A and B are perfectly general, if any Law whatever can be proved to be true in the Variations of the Exchangeable Relation of Any Two Quantities whatever, that Law must necessarily be true in the Exchangeable Relations of All Quantities whatever.*

Thus, by the *Law of Continuity* we are enabled to affirm that—

If any Law whatever can be proved to be true at any one point in the range of Prices, between any Two Quantities whatever, that same Law must necessarily be true at All points in the range of Prices, and between all Quantities whatever.

And as a necessary corollary from the preceding, we may affirm that—

If any Law can be proved Not to be true with regard to the Relation of Any Two Quantities whatever, that Law cannot be a General Law of Economics.

Furthermore, as it is a universally acknowledged principle of Natural Philosophy that that Law only is the true one which explains all the phenomena, it may be laid down as an unquestionable truth in Economics that—

If two or more Forms of Expression will explain or account for any phenomena regarding Price, or the change of Price, that Form of Expression only is to be adopted as the true one which explains All the phenomena in the Science, and not that particular case, or class of cases, only.

Now as we have shown in the previous book that the Ricardo-Mill Theory of Value violates every one of these fundamental principles of Natural Philosophy—and as Mill himself says that the Laws of Economics are to be formed by consciously and deliberately following the methods adopted in Physical Science—it follows that the Ricardo-Mill Theory of Value is to be utterly rejected, and we have now to investigate the True Law of Value, or the General Equation of Economics.

Economics is a Physical Science, because it is a pure Science of Causes and Effects. There being three Orders of Exchangeable Quantities, and, therefore, Six different kinds of Exchange, the object of the Science is to determine the Laws of the phenomena of these exchanges—that is, to determine the laws which govern the changes in their numerical Relations of Exchange. Hence we have a new Order of Variable Quantities; and the Laws which govern this new Order of Variable Quantities must be in strict harmony with the Laws which govern the Relations of Variable Quantities in general. The same general principles of reasoning which govern the relations of the stars in their courses must govern the varying relations of Economic Quantities.

The fact is that Astronomy is the physical science which is the type of Economics. The fundamental problem of Economics is identically the same as the fundamental problem of Astronomy. The Astronomer sees a number of Quantities—the heavenly bodies—moving in all sorts of directions—sometimes advancing, sometimes apparently stationary, sometimes retrograding—and his object is to discover a Single General Law which accounts for and governs all these varying relations. So the Economist sees a vast multitude of Quantities constantly changing their numerical relation to each other, and his object is to discover a single General Law which governs all these varying relations. Economics, like Astronomy, is a pure Science of Ratios.

Lord Lauderdale's Law of Value.

24. Now, how is the great General Law of Astronomy determined? In this way. Let the heavenly bodies at any given instant be in any position. They then change their positions; the problem is to discover the Law which governs these changes of relation.

We must proceed in exactly the same way in Economics.

Let any number of Economic Quantities at any given time have any given relation to each other. They then change their relations to each other: then the problem is to discover the single General Law which accounts for and governs these changes of relation.

Lord Lauderdale states the case in this way—

Take any two Quantities, A and B, which may vary with respect to each other. First let A remain constant while B varies.

Then the ratio of B to A will change from **Four Causes**.

It would **Increase in Value**—

1. From a **Diminution of Quantity**.
2. From an **Increase of Demand**.

It would **Diminish in Value**—

1. From an **Increase of Quantity**.
2. From a **Diminution of Demand**.

Now, as the Variation of A with respect to B will be governed by exactly the same Four Causes, it is quite clear that the Variation of both Quantities will be governed by **Eight Independent Causes**; and if these be connected in the form of an Equation, that will manifestly be the true **General Law of Value**, or the true **General Equation of Economics**.

And as it is in the form of a fraction containing no less than Eight Independent Variables, it at once shows the supremely complicated nature of the Science.

Lord Lauderdale has thus the credit of having established the true General Equation of Economics. This comprehends the whole science of Pure, or Analytical, Economics: exactly as the great Law of Newton governs the relations of the heavenly bodies.

This complicated Equation is the full expression of what is popularly known as the Law of Supply and Demand. All Economists admit that it is true when the prices of things are very low: they also admit that it is true when the prices of things are very high: they therefore admit that it is true at the **extremes** of prices: and therefore as it is true at the **extremes** of prices, the **Law**

of Continuity affirms that it is necessarily true at all points in the range of prices between the extremes: that is, that it is universally true: and therefore that it is the true General Law of Value: or the true General Equation of Economics.

Remarks on the General Equation of Economics.

25. The General Equation of Economics is, therefore, a Compound Ratio of a very complicated nature: and to apply it to particular cases requires a profound knowledge of the circumstances of the case: but yet it is demonstrably true: and the whole Science must be constructed, taking that Equation as the basis.

In obtaining this General Equation we have followed the method invariably used in all Physical Science. We have obtained the Independent Variables, and connected them by a General Law, or Formula. This insures **Certainty** to the Science: but it is on the last point that the real difficulty arises: namely, in giving Precision, or Numerical amounts, to the Co-efficients. It is absolutely impossible to say what numerical variations in Supply and Demand produce definite variations in Value. This has been attempted in some cases, as in that of corn: but it is manifestly impossible to obtain exact numerical data: and in fact though the same General Law is true in all cases, it is perfectly well known that it varies in every particular case: and that the same absolute variation in Supply and Demand in various Quantities will produce great differences in the variations of their numerical Values.

It is this impossibility of giving exact numerical Values to the co-efficients which makes many persons suppose that it is impossible to make Economics an **Exact** science. It is sometimes supposed that for a science to be an exact one, it is necessary that its Laws should be capable of exact Quantitative statement. This, however, is an error which has been specially pointed out by Comte, who well shows the difference between Certainty and Precision in Science. To constitute an **Exact** Science, it is not necessary that its laws can be ascertained with numerical **Precision**: but only that the **Reasoning** be **Exact**, or **Certain**. He says that a dangerous prejudice has sprung up: that because the **Precision** of different Sciences is very unequal, their **Certainty** is so too. This tends to discourage the study of the most difficult: Precision and Certainty are perfectly distinct. An absurd proposition may be very precise: as that the angles of a triangle are equal to three right angles. On the other hand, a Certain proposition may not be

Precise: as that a man will die. Hence though the different sciences may vary in **Precision**, that will not affect their **Certainty**.

This observation applies most forcibly to Economics. Some persons are apt to despise it because it does not bring out its results with the same precision as Mathematics. This, however, is a grievous mistake. In Economics the Causes of Phenomena can be ascertained with absolute certainty: this is all that is necessary to constitute Economics an **Exact** science. Because, the method of producing a required result being pointed out with absolute certainty, it has only to be put into force until the result is produced.

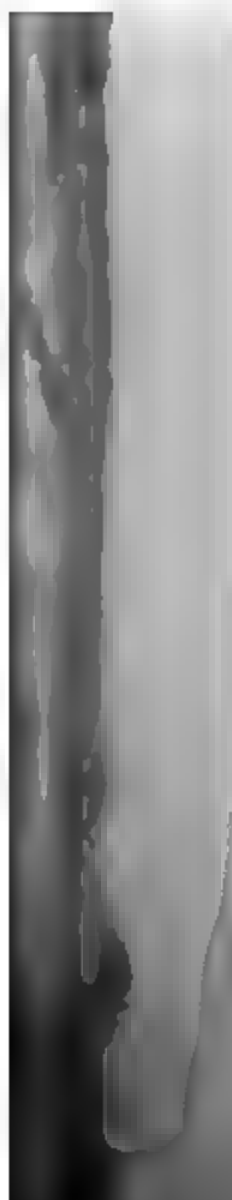
In considering the General Equation of Economics we see the application of Bacon's aphorism¹—"That which in Theory is the Cause, in Practice is the Rule."

No other Quantities but Demand and Supply appear on the face of the Equation: it is therefore certain that no other Causes influence Value, or changes of Value, except Intensity of Demand and Limitation of Supply. It is certain that neither Labour nor Cost of Production have any **direct** influence on Value: it can only be by affecting the Demand or the Supply: and that no change of Labour, nor of Cost of Production, can have any influence on Value, unless they produce a change in the relation of Supply and Demand.

By this means we are enabled to create a rigorously **Exact** Theory of Economics, and by reverently following the precepts of the mighty prophet of Inductive Philosophy, and the immortal creators of the various Inductive Sciences, it is seen that Economics, as a Moral Science, is fitted to take rank with Dynamics and Optics as a great Positive Inductive Physico-Moral Science, and it is the only Moral Science capable of being raised to the rank of an Exact Science.

In interpreting, however, the General Equation of Economics, it is necessary to make one observation. It is sometimes supposed that Value is only affected by the actually existing quantity of produce which is brought into the market. This, however, is not so. The expected quantity which may be brought into the market has a most important influence on the Value of the existing quantity. If there were a failure of the coming crops, that would exert a most potent influence on the present Value of the existing stock. Or if prices had been very high, in consequence of a great scarcity of

¹ *Nov. Org.* bk. i. aph. 3.



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danger over? Far from it. On the contrary, we are menaced, if possible, with a more terrible danger still. Because that dread spectre of Socialism, which now threatens war and revolution to every country on the Continent, and whose fatal doctrines are spreading even in this country, is entirely based, as the Socialists themselves say, on the doctrines of Wealth put forth by Adam Smith and Ricardo.

These considerations, which are nothing but the literal truth, show the gravity and importance of the inquiry which we have now to undertake, and we hope that we may now clear away this reproach.

We have now to inquire what is the common property or principle which constitutes things Wealth.

It is not sufficient to enumerate a number of isolated objects under a term or definition. As pointed out by Bacon long ago, a scientific definition essentially requires some **Principle**, or **Quality**, which is common to all the objects which are classed under it. It is not sufficient to allege that lands, houses, jewellery, money, cattle, corn, labour and services, Debts, Rights of Action, the Funds, &c., are Wealth, without clearly defining the Quality, or Principle, which is common to them all, and which constitutes them Wealth, *i.e.*, that which constitutes the essence of Wealth. This is what Whewell calls the colligation of facts.

It is also a fundamental principle of Philosophy that when once the Quality, or Principle, is settled, which is the basis of the science, all Quantities whatever, which possess that Quality in common must be included in the definition, however diverse they may be in nature and form; whatever other Qualities they may possess; and even though they possess no other Quality in common but that single one.

So Bacon earnestly inculcates, as the foundation of all true science, a careful collection of all kinds of instances in which the given nature, or Quality, is found—"But whosoever is acquainted with Forms (*i.e.* natures) embraces the unity of nature in substances the most unlike."¹ Also—"The investigation of Forms proceeds thus: a nature, or quality, being given, we must first of all have a muster or presentation before the understanding of all known instances which agree in the same nature, or quality, *though in substances the most unlike*. And such collection must be made in the matter of a history, without speculation."²

This is what Plato designates as *the one in the many: i.e.*

¹ *Nov. Org.* bk. ii. aph. 3.

² *Nov. Org.* bk. ii. aph. 11.

the same quality appearing in quantities of the most diverse forms.

What, then, is the common Property, or Principle, which constitutes things **Wealth**?

The meaning of the word **Wealth** has been the subject of controversy for centuries, and in considering this important question it appears, upon the whole, to be the best way to explain the meaning of the term as used by the Economists who founded Economics as a Science: and then to consider how far it is consistent with the scientific principles of framing definitions, and how far preceding and subsequent writers have differed from it.

Definition of Wealth by the Economists.

The Economists defined **Wealth** (*Richesse*) to be the Material products of the earth, which are brought into Commerce and Exchanged: and those only.

Thus Baudeau says¹—"Useful and agreeable objects proper for our enjoyment are called **Biens** (*Goods*), because they conduce to the preservation, the propagation, and the well-being of the human race.

"But sometimes these **Biens** (*Goods*) are not **Richesse** (*Wealth*), because they cannot be exchanged for other goods, or be used to procure other enjoyments. The products of Nature, or the works of Art, the most necessary or the most agreeable, cease to be **Wealth** (*Richesse*) when you lose the power of exchanging them, and of procuring other enjoyments by means of this Exchange. One hundred thousand feet of the most beautiful oak in the world would not be **Wealth** (*Richesse*) to you in the interior of North America, where you could not divest yourself of its possession by means of an Exchange.

"The title of **Wealth** (*Richesse*), therefore, supposes two things: first, useful qualities, which render these objects useful and agreeable, and fit for enjoyment—which renders them **Biens** (*Goods*)—secondly, the possibility of **exchanging** them, which enables these **Biens** (*Goods*) to procure you others, which constitutes them **Richesse—Wealth**.

"The possibility of exchange supposes that there are other goods for which they can be exchanged."

So Quesnay says²—"We must distinguish between **Biens**

¹ *Introduction à la Philosophie Economique*, ch. i. 5.

² *Maximes Générales du Gouvernement*, Max. 18, note.

(*Goods*), which have **Value in Use** and not **Value in Exchange**: and **Richesse**, or **Wealth**, which has both **Value in Use** and **Value in Exchange**. For instance, the savages in Louisiana enjoy many **Biens**, such as wood, game, the fruits of the earth, &c., which are not **Richesse—Wealth**—because they have no *Value in exchange*.

“But since some kinds of commercè have been established between them and the French, the English, the Spaniards, &c., part of these **Biens** have acquired a Value in exchange, and have become **Richesse—Wealth**.”

So Le Trosne says¹—“Man is surrounded by wants which are renewed every day.

“Whatever they are, it is only from the earth that they can draw the means of satisfying them (?) The physical truth that the earth is the source of all **Biens** is so self-evident that no one can doubt it (?) . . . But it is not sufficient to estimate products by their useful qualities, we must consider the properties they have of being exchanged against each other.

“Products acquire, therefore, in a state of society a new quality, which springs from the communication of men with each other; this Quality is **Value**, which makes products become **Richesse—Wealth**, and so there is nothing superfluous, because the excess becomes the means to obtain what one wants.

“**Value** consists in the **Relation of Exchange** which exists between such and such products.

“In a word, the **Quality of Richesse** supposes not only a useful property, but also the possibility of exchange, because Value *is nothing but the Relation of Exchange*.

“The earth, in truth, only gives products which have the physical qualities to satisfy our wants: it is **Exchange** which gives them **Value**, a Quality relative and accidental. But as it is the products themselves which are the sole matters of exchange, it follows that we may say with truth that it is the earth which produces not only all **Biens**, but all **Wealth**.” (?)

Now it is certainly true that man has constant wants. But it is not true that it is the earth only which supplies the means to satisfy them. Man has not only physical wants, but has mental wants—he constantly wants services of different kinds, the services of advocates, physicians, surgeons, instructors, and many others. And he pays for them just as he pays for the physical substances which minister to his physical wants. Consequently it is manifest

¹ *De l'intérêt sociale*, ch. i. § 1, 2, 3, 4.

that the earth is **not** the source of **all** that ministers to the wants of man.

However, the definition of Wealth which was unanimously adopted by the Economists, who were a numerous and influential sect, is perfectly clear. It was the **Material** products of the earth which are brought into **Commerce** and **Exchanged**, and those **only**.

Thus the Economists made **Exchangeability** the real essence of **Wealth**, but restricted it to Exchangeable Material products.

But, as a matter of fact, there are other things which can be bought and sold, or exchanged, besides material products. Thus Labour and Services can be bought and sold, and their value can be measured in money.

So also Abstract Rights, such as Credits or Debts, Bank Notes, Bills of Exchange, Shares in Commercial Companies, the Funds, Copyrights, Patents, and mere Rights of many other kinds, can be bought and sold, and possess the Quality of Exchangeability.

Nevertheless the Economists, though admitting that there is a Commerce in Labour and Credits or Rights, steadfastly refused to acknowledge that Labour and Credit are Wealth, because they alleged that to admit that Labour and Credit are Wealth would be to maintain that Wealth can be created out of Nothing. They repeated a multitude of times that man can create Nothing, and that Nothing can come out of Nothing—*ex nihilo nihil fit*.

Now this is directly contrary to the fundamental law of Natural Philosophy which Bacon so distinctly declared, because as they admitted that Exchangeability is the essence of Wealth, it necessarily follows from that fundamental law that both Labour and Credit which both possess the quality of Exchangeability must be admitted to be Wealth; and we must now inquire whether other Economists, both ancient and modern, have excluded Labour and Credit from the term Wealth, and restricted it to material products only.

It is also necessary to see what reply can be given to the dogma that man can create Nothing, and that *ex nihilo nihil fit*.

Aristotle's Definition of Wealth.

Ancient writers for 850 years unanimously held that **Exchangeability**, or the capability of being bought and sold, or exchanged, is the sole essence and principle of **Wealth**, and that everything

whatever which can be bought and sold, or exchanged, is **Wealth**, whatever its nature or its form may be.

Thus Aristotle says, *Nicomach. Ethics*, book v.—

“*χρήματα δὲ λέγομεν πάντα ὅσων ἡ ἀξία νομίσματι μετρεῖται.*”

“*And we call **Wealth** all Things whose **Value** can be measured in **Money**.*”

So Ulpian, the eminent Roman jurist, says—

“*Ea enim **Res** est quæ emi et venire potest.*”

“*For that is **Wealth** which can be bought and sold.*”

All the most eminent modern Economists have come to agree in this definition.

Thus Mill says¹—“**Everything**, therefore, forms a part of **Wealth** which has a **Power of Purchasing**.”

Here we have a perfectly good General Concept, or Definition, which contains only one General Idea, and it is, therefore, fitted to form the basis of a great Science. It is a Concept as wide and general as the dynamical definition of Force. That single sentence of Aristotle's is the germ out of which the whole Science of Economics is to be evolved, just as the huge oak-tree is developed out of the tiny acorn.

A **Quantity** means **Anything** which can be **Measured**; hence an **Economic Quantity** means **Anything** whatever whose **Value** can be **Measured** in **Money**, or which can be **bought** and **sold**, or **Exchanged**.

The sole criterion, then, of anything being **Wealth** is—can it be bought and sold? Can it be exchanged separately and independently of anything else? Can its Value be measured in Money?

This criterion may seem very simple, but, in fact, to apply it properly, to discern what can, and what cannot, be bought and sold separately and independently of anything else, or to perceive all things whose Value can be measured in Money, requires a thorough knowledge of some of the most abstruse branches of Law and Commerce.

On the Three Species of Wealth, or of Economic Quantities.

Having, then, adopted Exchangeability, or the capability of being bought and sold, as the sole essence and principle of Wealth, we have next to discover how many different orders or Species of Quantities there are which satisfy this definition.

First there are Material Things of all sorts, such as lands, houses,

¹ *Preliminary Remarks*, p. 5.

money, jewellery, corn, cattle, &c., &c., which can be bought and sold, or whose value can be measured in Money. Everyone now admits all these things to be Wealth, and, therefore, we need say nothing more about them here.

There are, however, two other Orders of Quantities of a totally different nature—one of which may be typified by the term **Labour**, and the other by the term **Credit**—which can be bought and sold, or whose Value can be measured in Money, and in modern times there has been a vast amount of controversy as to whether they are to be admitted as Wealth or not: and it is these Species of Quantities which we have now to consider.

Ancient Dialogue to show that Labour is Wealth.

We have under **Labour** quoted copious extracts from an ancient dialogue termed the *Eryxias*, in which the writer, adopting Aristotle's definition of Wealth as *Anything whose value can be measured in money*, shows that the Sciences, *i.e.* Labour, are Wealth; because persons can gain a living by giving instruction in them, and all modern Economists admit that Labour is a saleable commodity. We therefore need not repeat these arguments here.

Demosthenes shows that Personal Credit is Wealth.

But **Personal Qualities** may be used as **Purchasing Power** in another method besides that of **Labour**.

If a merchant enjoys good "Credit" as it is termed, he may go into the market and buy goods, not with Money, but by giving his **Promise** to pay money at a future time; that is, he creates a **Right of Action** against himself. The goods become his property exactly as if he had paid for them in Money. It is a Sale or an Exchange. The Right of Action is the price he pays for the goods; it is termed a **Credit**—in French, a **Créance**—because it is not a Right to any specific sum of money, but only a Right of Action to demand a sum of money from the merchant at a future time.

Hence a merchant's **Credit** is Purchasing Power, exactly as Money. The merchant's **Purchasing Power** is his **Money and his Credit**. They are both therefore equally Wealth by Mill's definition. When a merchant purchases goods with his **Credit**, instead of with money, his Credit is **valued in money**; because the seller of the goods accepts his Credit as equal in value to Money; his Credit is valued in money exactly as his Labour may

be. Hence by Aristotle's definition of Wealth, which is now universally accepted, the merchant's **Personal Credit** is Wealth.

So Demosthenes says¹—

“δυοῖν ἀγαθοῖν ὄντοι πλούτου τε καὶ πρὸς ἅπαντας πιστεύεσθαι, μείζον ἐστὶ τὸ τῆς πίστεως ὑπάρχον ἡμῖν.”

“There being two kinds of Wealth—Money and General Credit—the greater is Credit, and we have it.”

So also again²—

“εἰ δὲ τοῦτο ἀγνοεῖς ὅτι Πίστις Ἀφορμὴ τῶν πασῶν ἐστὶ μέγιστη πρὸς χρηματισμὸν πᾶν ἂν ἀγνοήσεις.”

“If you were ignorant of this—that Credit is the greatest Capital of all towards the acquisition of Wealth you would be utterly ignorant.”

Thus Demosthenes shows that Personal Credit is ἀγαθά—**Wealth**, Property, Goods, and Chattels—and ἀφορμή, or **Capital**.

Thus, though **Personal Credit**, like Labour, can neither be seen nor handled nor touched, yet it can be bought and sold, or exchanged, its *Value can be measured in Money*—it is **Purchasing Power**—and therefore it is **Wealth**.

And as we have seen that Adam Smith declares that a man's Labour is his most sacred possession, of which no person has the right to despoil him; so to all Bankers, Merchants, and Traders, their **Credit** is their most sacred possession, of which no one has the right falsely to despoil them.

Hence the Personal Credit of all Bankers, Merchants, and Traders is an integral and colossal portion of the **National Wealth**—just as the industrial faculties of working men of all kinds are.

So also the **Credit** of the State, by which it can purchase Money and other things by giving persons the Right to demand a series of future payments from it, is **National Wealth**.

Modern Economists include Personal Credit under the term Wealth.

It has been shown that the Economists steadfastly refused to admit that **Personal Credit** is **Wealth**; because they alleged that to allow that would be to maintain that Wealth can be created out of nothing.

But contemporary, general, and mercantile writers were entirely against them on that point.

¹ *Against Leptines*, 484, 20.

² *For Phormion*, 958.

Thus Daniel de Foe says¹: "Credit is so much a tradesman's blessing that it is the choicest Ware he deals in, and he cannot be too chary of it when he has it, or buy it too dear when he wants it; it is a Stock to his warehouse; it is Current Money in his cash chest."

So that keen Metaphysician, Bishop Berkeley, who has many searching questions on Economics in his *Querist* asks—

Quest. 35: "Whether **Power** to command the industry of others [*i.e.* **Credit**] be not real Wealth?"

So Melon says²: "To the calculation of values in Money there must be added the current **Credit** of the merchant and his **Possible Credit**."

So Dutot says³—"Since there has been a regular commerce among men, those who have need of money have made Bills, or Promises to pay money. The first use of Credit, therefore, is to represent Money by Paper. The usage is very old: the first want gave rise to it. It *multiplies* specie considerably: it supplies it where it is wanting, and which would never be sufficient without the Credit, because there is not sufficient Gold and Silver to circulate all the products of Nature and Art. So there is in commerce a much larger amount in Bills than there is in specie in the possession of the merchants.

"A well-managed Credit amounts to tenfold the funds of a merchant, and he gains as much by his Credit as if he had ten times as much Money. This maxim is generally received among all merchants.

"**Credit** is, therefore, the greatest **Wealth** to everyone who carries on commerce."

So Smith says⁴—"Trade can be extended as Stock increases: and the Credit of a frugal and thriving man increases much faster than his Stock. His trade is extended in proportion to the amount of both [*i.e.* his **Stock** and his **Credit**], and the sum or amount of his profits is in proportion to the extent of his trade, and his annual accumulation in proportion to his profits."

So Junius says—"Private Credit is **Wealth**."

Franklin says—"Credit is **Money**."

Smith expressly includes "Natural and acquired abilities" under the term Fixed Capital. Now Mercantile Character, or **Personal**

¹ *The Complete English Tradesman*, ch. xvii.

² *Essai Politique sur le Commerce*, ch. xxiv.

³ *Reflexions sur le Commerce et les Finances*, ch. i. art. 10.

⁴ *Wealth of Nations*, bk. i. ch. 10.

Credit, evidently comes under the designation of "Natural and acquired abilities." Hence **Personal Credit** is included by Smith under the term **Capital**.

No person has more explicitly declared that **Personal Credit** is **Wealth** than Mill.

He says in the preliminary remarks—"Everything, therefore, forms a part of **Wealth** which has a **Power of Purchasing**."

He then says¹—"For **Credit**, though it is not Productive Power, is **Purchasing Power**."

He also says²—"The amount of **Purchasing Power** which a person can exercise is composed of all the Money in his possession, or due to him (*i.e.* the Bank Notes, Bills, and Credits he has), and of all his **Credit**."

"**Credit**, in short, has exactly the same **Purchasing Power** with **Money**."

And many other passages to the same effect.

Now, if Mill lays down as the fundamental definition of Wealth—

"Everything that is Purchasing Power is Wealth." And if he says—"Credit is **Purchasing Power**." Then the necessary inference is that—

"Credit is Wealth."

That is a syllogism in which Mill is safely padlocked, and from which there is no escape.

Hosts of passages to a similar effect from other writers might be cited, if necessary: but that would be wholly superfluous: because an argument is to be judged of by its own intrinsic force, and not by the number of persons who assert it.

The simple statement of the case is this—ancient writers unanimously held, and modern Economists have come at last to agree with them, that the only true definition of Wealth is—Everything whose Value can be measured in money—or which can be bought and sold—**Everything** which has **Purchasing Power**. Now, as Personal Credit can be valued in money, and is Purchasing Power, it necessarily follows, by the definition, that **Personal Credit** is **Wealth**.

On Abstract Rights as Wealth.

But there is yet another, or a Third order of Quantities, which can be bought and sold, or exchanged, and whose *Value can be measured in money*: and these are Abstract Rights of various sorts

¹ *Principles of Political Economy*, bk. iii. ch. xi. § 3.

² *Ibid.* bk. iii. ch. xii. § 3.

—**Rights and Rights of Action.** But as we have fully discussed these under **Rights**, we need not say more about them here.

Thus for the space of 850 years the ancients unanimously held that **Exchangeability** is the sole essence and principle of **Wealth**: that everything which can be bought and sold, or exchanged, or whose *Value can be measured in Money*, is **Wealth**. They also showed that there are three distinct orders of **Quantities** which possess the quality of **Exchangeability**, namely, (1) material things; (2) **Personal Qualities** both in the form of **Labour** and **Credit**; and (3) abstract **Rights**. And reflection will show that there is nothing which can be bought and sold, or whose **Value** can be measured in money, which is not of one of these three forms—it is either a material chattel, or a **Credit**, a service, or an abstract **Right**.

These three orders of **Exchangeable** or **Economic Quantities** can be exchanged in **Six** different ways; and these six distinct kinds of **Exchange** constitute the **Science of Exchanges** or **Economics** or **Commerce** in its widest extent, and in all its forms and varieties.

And if any of the great Roman lawyers, with the materials he had before him, had ever conceived the idea of constructing a complete scientific exposition of the mechanism of the mighty system of **Commerce**, the **Science of Economics** would have been 1500 years in advance of its present state, and it would have saved centuries of misery, bad legislation, and bloodshed to the world.

Thus there is not a trace in any ancient writer of the fatuous doctrine that all **Wealth** is material, and derived from the materials of the globe, or the product of land, labour, and capital.

It thus being shown that there are three, and only three, orders of **Exchangeable** or **Economic Quantities**, they are all included under the term **Property (Property)**.

Wealth in Economics is an Exchangeable Right.

It follows from the preceding considerations, that the true definition of **Wealth** in **Economics** is an **Exchangeable Right**.

Now there are **Three** kinds of **Rights**, or **Property**, which can be bought and sold; or whose **Value** can be measured in **Money**.

I. **Corporeal** or **Material Property** or **Rights**. There may be the **Right** or **Property** in some specific material substance which has already come into existence: and has come into the actual possession of the owner. This **Species of Property** in **Roman** and **English Law** is termed **Corporeal Property**: because it is the **Right** to

certain specific *corpus*. It is also called Material Property : because it is the right to certain specific Matter. Hence we term this Species of Property **Corporeal** or **Material Wealth**.

II. **Immaterial Property**. The Property which a man has in his own mental and intellectual Qualities : in his own Labour : or in his capacity to render any sort of service. As Smith says—"The Property which every man has in his own Labour, as it is the original foundation of all other property, so it is the most sacred and inviolable."

Now a person may sell the Right to demand some Labour or Service from him. As all these services, though they require some bodily instrument to give effect to them, are in reality, operations of the mind, we may call them **Immaterial Property** : or **Immaterial Wealth** : as J. B. Say, the French Economist, does.

III. **Incorporeal Property**. There is lastly a third kind of Property, or Right, wholly separated and severed from any specific *corpus*, or matter in possession. It may either be in the possession of some one else at the present time : and may only come into our possession at some future time : or it may be even not in existence at the present time.

Thus we may have the Right, or Property, to demand a sum of money from some person at some future time. That sum of money may no doubt be in existence at the present time, but it is not in our possession : it may not even be in the present possession of the person bound to pay it. It may pass through any number of hands before it is paid to us. But yet our Right to demand it at the proper time is present and existing, and we may sell or transfer that Right to any one else for Money.

We may also have the Right to something which is not yet even in existence ; but will only come into existence at a future time.

Thus those who possess lands, cattle, fruit trees, &c., have the Right, or Property, in their future produce. This produce is not in existence at the present time—it will only come into existence at a future time : but the Right, or Property, to it when it does come into existence is present and existing, and may be bought and sold like the Right to any material product. This species of property is called in Roman Law and English Law, **Incorporeal Property**, because it is a Right, but separated from any specific *corpus*. Hence it is called **Incorporeal Wealth**.

But all these three different kinds of Rights possess the Quality of Exchangeability ; they can all be equally bought and sold, or exchanged : the value of each of them can be measured in money :

they are all equally merchandise, or articles of commerce. They are each therefore, *Pecunia, Res, Bona, Merx*; χρήματα, πράγματα, οἶκος, οὐσία ἀγαθά, &c.: goods, chattels, merchandise, vendible commodities, wealth, in the jurisprudence of all nations.

And as it is the Quality of Exchangeability which alone constitutes anything Wealth, and is the sole Quality which Economics regards, it follows that all these Three kinds of Rights are equally Wealth in Economics. And all the fundamental Concepts and Definitions, and all the Laws of Economics must be enlarged and generalised, so as to comprehend indifferently the Exchanges of these three orders of Rights.

Reply to the Dogma of the Economists that Immaterial and Incorporeal Quantities are not to be admitted to be Wealth.

We have shewn that the Economists steadfastly refused to admit that Labour and Credit are Wealth: because they alleged that to term them Wealth, would be to maintain that Wealth can be created out of Nothing.

But we have also shown that ancient writers unanimously held that Labour and Credit are Wealth—and that modern writers now also unanimously hold that Labour and Credit are Wealth—in total defiance of the dogma that Nothing can come out of Nothing.

Of course the whole discussion turns on the meaning of Wealth. The Economists persisted in restricting the term to material things only, and certainly no one thinks of maintaining that material things can be created of nothing.

But we have shown that it is contrary to the recognised laws of Natural Philosophy to admit that the essence of Wealth consists in Exchangeability, and then to restrict it to material Exchangeable Quantities only. The ancients were infinitely more scientific. As soon as they recognised that Exchangeability is the essence of Wealth, with true Philosophy, they included everything whatever which is Exchangeable under the term Wealth.

Adam Smith burst the bonds of the narrow and unscientific dogma of the Economists, and recognised three orders of Exchangeable Quantities as Wealth and Capital, in which he has been followed by J. B. Say and J. S. Mill, and all modern Economists of repute.

Nevertheless there are still some people who feel a difficulty on the subject, and are somewhat startled at the idea that Wealth can be created out of Nothing. We shall see what a facile answer can

be given to the dogma of the Economists by the considerations we have presented.

The real difficulty which impedes the true apprehension of the subject is very similar to that which for a long time obstructed the reception of the Newtonian Theory of Gravitation on the Continent.

It had been long laid down as an incontrovertible dogma, *that a body cannot act where it is not.*

When, therefore, the Newtonian doctrine of central forces was published, showing that the motions of the planets may all be accounted for by certain forces emanating from the sun and themselves, the opponents of the system maintained that it violated the fundamental dogma that a body cannot act where it is not. And several of the most eminent continental mathematicians, Leibniz, Huygens, the Bernouillis, and the French mathematicians, who were all followers of the Cartesian vortices, long refused to receive the Newtonian Theory of Gravitation on that account.

A similar difficulty is at the root of the unwillingness of the Economists and some modern writers to admit Labour and Credit to be Wealth.

Many thousands of years ago a materialistic philosophy sprang up on the banks of the Ganges. Kapila is said to have been the author of the Sankhya Philosophy, and to have invented the dogma that *Nothing can come out of Nothing*, in order to disprove the existence of a Deity. This Philosophy migrated from the banks of the Ganges to those of the Ilissus and the Tiber, and is familiar to us under the names of Leucippus, Anaxagoras, Parmenides, Epicurus, Lucretius, and scores of others.

The fundamental dogma of Lucretius, the hierophant of the materialistic philosophy, is that *No Thing can come out of Nothing.*

"Nullam Rem e Nihilo gigni divinitus unquam."¹

"The Deity never yet made Any Thing out of Nothing."

"Nil igitur fieri de Nilo posse fatendumst."²

"It must therefore be allowed that Nothing can be created out of Nothing."

Moreover, that **No Thing** can go back into **Nothing.**

**"Huc accedit uti quæque in sua Corpora rursum
Dissolvat Natura, neque ad Nihilum interimat Res."**³

Hence it follows that Nature resolves all things into their own elements: and does not destroy Things into Nothing."

¹ *De Rerum Natura*, i. 151.

² *Ibid.* 205.

³ *Ibid.* i. 216.

"Nullius exitium patitur Natura videri."¹

"Nature does not suffer the annihilation of anything to be seen."

"Immortali sunt Natura prædita certe

Haud igitur possunt ad Nilum quæque reverti."²

"They are, therefore, endowed with an immortal nature. Therefore things cannot revert into Nothing."

"Haud igitur redit ad Nihilum Res ulla, sed omnes

Discidio redeunt in corpora materialia."³

"Therefore, No Thing can go back into Nothing: but all when destroyed return into the elements of matter."

"Haud igitur penitus pereunt quæcunque videntur

Quando alid ex alio reficit Natura, nec ullam

Rem gigni patitur, nisi morte adjutum alienâ."⁴

"Therefore visible things do not altogether perish when Nature remakes one thing out of another, nor does she suffer any Thing to be produced unless aided by the destruction of another."

And this is the constant refrain of the Lucretian Philosophy: that **No Thing** can be created out of **Nothing**: and that **No Thing** can go back into **Nothing**.

"Nunc age Res quoniam docui non posse creari

De Nihilo, neque item genitas ad Nil revocari."⁵

"Now, come, since that I have taught that Things cannot be created out of nothing, no more than when once produced can they be reduced into Nothing."

"At quoniam supera docui Nil posse creari

De Nihilo, neque quod genitumst ad Nil revocari

Esse immortalis Primordia corpore debent."⁶

"But since I have taught above that Nothing can be created out of Nothing: and that what is once produced cannot be called back into Nothing, the elements must be endowed with immortal bodies."

And this is the very doctrine that physicists maintain to the present day. Chemists delight to expatiate to their audiences on the indestructibility of all things. How seeming destruction is merely the dissolution of atoms under their present combinations: to re-appear in forms and new combinations in perpetual succession.

The fallacy upon which the Lucretian Philosophy makes ship-

¹ *De Rerum Naturâ*, i. 224.

² *Ibid.* i. 236.

³ *Ibid.* i. 248.

⁴ *Ibid.* i. 262.

⁵ *De Rer. Nat.* i. 265.

⁶ *Ibid.* i. 543.

wreck, so far as regards Economics, is now evident. Lucretius throughout assumes that **Nulla Res** is the same as **Nihil**.

Lucretius was a sublime poet, but he was not a Jurist. He had no idea of **Res** meaning anything but a material object, as it did in early Latin and Jurisprudence. He had no idea that the Jurists had extended Res to include both Labour and Credit. And thus the doctrine that *ex nihilo nihil fit* falls to the ground.

On Immaterial Quantities as Res or Wealth.

II. But Economics and Law confound the best settled doctrines of the sages of Eld.

It is true that many Economists have declared that man can create nothing, and that all Wealth comes from the earth. But Smith, Say, Senior, Mill, and all Economists of note now unanimously class Personal Qualities as Wealth: and Labour as a vendible Commodity.

All modern Economists of note are now agreed that the ancients were right in holding Exchangeability to be the sole essence and principle of Wealth; that whatever can be bought and sold, or exchanged, or whose value can be measured in money, is Wealth. Twenty-two centuries ago, the author of the *Eryxias* irrefragably proved that **Knowledge is Wealth**.

Knowledge, therefore, by the very generality of the definition, and by the consent of every Economist of note, is Wealth. And where does knowledge come from? And what is it formed out of? Does it come from the earth? And is it formed out of the materials of the globe? All that we know is that knowledge originates in the mind. Knowledge is formed *in* the mind, by great Labour, very often. But is it formed *out of* the materials of the mind? And if so, what is the Mind composed of? Does it come from the earth? And are we to have an atomic theory of the mind and of Knowledge? Will some metaphysical Dalton revive the doctrine of Lucretius and the Stoics, that Knowledge and the Human Mind are composed of indestructible primordial atoms?

πολλὰ τὰ δεινά, κούδὲν ἀνθρώπου δεινότερον πέλει.

But this same Knowledge—whence cometh it? What is it? Whither goeth it?

We know not—do our readers? Natheless, it is Wealth, and, therefore, it is within the domain of the Economist. It may be bought and sold, it may be valued in money, it is the product of

Labour, it may be handed down from age to age, like any material chattel.

The acquisition of Knowledge is the acquisition of Wealth, and the loss of Knowledge is the loss, or destruction, of Wealth. And is the loss or destruction of Knowledge the dissolution of indestructible primordial atoms?

Here then we have vast masses of Wealth, and the question is—where does it come from? And what is it composed of? And there can be but two answers to the question. Either Knowledge is composed of indestructible primordial atoms, or it is not. If it be so, then the formation of Knowledge is not the creation of Wealth out of **Nothing**. But unless we are prepared to admit that—and who is?—the formation of Knowledge must be the creation of Wealth out of **Nothing**, and the loss or destruction of Knowledge must be the **Decreation**, the **Annihilation**, or the return of **Wealth** into **Nothing**.

Every one knows that Trade Secrets are a most valuable form of Wealth. As one example of this, out of thousands, we may take a case which was before the Scotch Courts some years ago. In the 17th century, a person named Anderson discovered a way of making pills, which soon became very popular. The secret of making these pills has been handed down from generation to generation, and has been a constant source of Wealth to the possessors of it. Some years ago the possessor of it became bankrupt, and his creditors claimed the right of having it given up to them, as part of the bankrupt's assets. The pills have been analysed in vain, and the secret of their composition has never been able to be discovered.

Now here is a manifest case of a trade secret—Knowledge—being Wealth; and where did this Wealth, or Knowledge, come from? And what is it composed of? Did it come from the earth? And is it composed of the materials of the globe? And yet it has been handed down as an heirloom from age to age. If the owner of the secret died without divulging it, there would be a manifest loss of Wealth, and what would become of it in that case? Would it be resolved into undying atoms?

Now, Knowledge is Wealth—and Knowledge is a **Res**. And here we have enormous masses of **Res**—which are created out of **Nothing**—and if lost, may go back into **Nothing**. This is one example which entirely overthrows the doctrine of Lucretius and the Physical Philosophers, that **No Thing** can be created out of **Nothing**, and that **No Thing** can go back into **Nothing**.

The doctrines of those Economists who maintain that all Wealth

comes from the earth, and is formed out of the materials of the globe, are also overthrown, and who maintain that man can create **No Thing**. For here we have vast masses of Wealth, which do not come from the earth, and are created by man.

Hence, it is evident that there is another source of Wealth besides the earth, namely the **Human Mind**.

On Incorporeal Quantities as Res, or Wealth.

III. But the third Order of Economic Quantities—Abstract Rights—do not originate in the Earth, nor yet in the Mind. And here again Lucretius is at fault. For he says that there is **No Thing** besides the **Void** which is separated from some *corpus*.

“Omnis ut est igitur per se Natura duabus.

Consistit Rebus : nam **Corpora** sunt et **Inane**.”¹

“*Therefore all Nature as it exists, is constituted of two Things : for there are Corporeal Things and there is the Void.*”

“Præterea nihil est quod possis dicere ab omni

Corpore sejunctum : secretumque esse ab **Inane**

Quod quasi tertia sit numero Natura reperta.”²

“*Besides, there is nothing which you could say is separated from any Body—and distinct from the Void, which would, as it were, count as the discovery of third Nature.*”

“Et facere et fungi sine **Corpore** **Nulla** potest **Res**.”³

“And **No Thing** can act and function without a **Body**.”

“Ergo præter **Inane** et **Corpora**, tertia per se

Nulla potest **Rerum** in numero Natura relinqui

Nec quæ sub sensus cadat ullo tempore nostros

Nec ratione animi quam quisquam possit apisci.”⁴

“*Therefore, besides the Void and Bodies no third Nature can be left to be counted among Things which can either be recognised by the senses, or which anyone can grasp by the reason of his mind.*”

From these lines it is clear that Lucretius did not apprehend the nature of Rights of Action, Debts, Bills of Exchange, and other kinds of Incorporeal Property, or he would have found it necessary to modify this part of his Philosophy.

Jurists of all nations unanimously class **Incorporeal Quantities**, or **Abstract Rights**, under the terms **Res**, *Pecunia*, *Bona*,

¹ *De Rer. Nat.* i. 419.

² *Ibid.* i. 430.

³ *Ibid.* i. 443.

⁴ *Ibid.* i. 445.

Merx : χρήματα, πράγματα, οἶκος, οὐσία ἀγαθή, οὐσία ἀφάνης : Goods, Chattels, Merchandise, Vendible Commodities, Incorporeal Things, Incorporeal Wealth.

If Lucretius had shown his poem before he published it, to his friend Cicero, he would have smiled. He would have taken a Bill of Exchange out of his desk, and said—"My friend Lucretius, you say that **No Thing** can exist separate from a Body, nor act nor function without a Body. Now my son is going to Athens to-morrow to attend his classes, and as it would not be safe for him to carry Money with him, I have got from my banker in the forum a Bill of Exchange on Athens. This Bill of Exchange is a simple Right of Action—it is a **Res**—and yet it was created out of **Nothing** by my banker at my request. It is what we lawyers call a **Res Incorporalis**, which you maintain, cannot exist in the nature of things. When my son presents this bill to the banker at Athens, he will give him the sum for which it is payable. Therefore you see that it acts and functions without a body, and hence, my friend, your doctrine that there is no third Thing in Nature besides Bodies and the Void, and that **No Thing** can act and function without a Body, requires reconsideration. If you will come to myself or to Hortensius, and have a little chat with us, we will explain to you that in our law, Abstract Rights of many different sorts are termed **Res Incorporales** : and that these Abstract Rights can be bought and sold, and transferred from one person to another with the utmost facility by word of mouth, without any Body. Thus, for example, if Titius is bound to pay Junius a sum of money, and Junius wishes to transfer that Debt, or Right, to Lucius, the three parties meet together. Junius transfers his Right to Lucius by word of mouth, and Titius agrees by word of mouth to pay Lucius, the Right, or **Res**, is as effectually transferred as a piece of money would be by manual delivery. And in a similar manner this Debt—a **Res**—may be transferred any number of times in exchange for goods, and effect sales just like a piece of money. What then becomes of your doctrine that there can be no **Res** without a Body—and that a **Res** cannot act and function without a Body?

"In the case of this Bill which I hold in my hand, there is no doubt a piece of paper, but you must not think that the piece of paper is the **Res**—it is the Right of Action written down on the paper which is the **Res** : and this **Res** equally exists whether it is written down on paper or not. I had a wondrous dream last night ; methought that in distant ages, many centuries hence, men will have acquired such marvellous powers, that they will be able to stretch

wires from the most distant parts of the earth to each other, and by some magical agency of a nature of which I cannot form the most vague idea, they will be able to send messages to the most distant countries as speedily as by a flash of lightning. How this is to be done is beyond me to conceive—unless peradventure men should succeed in taming the lightning to their will, and be able to compel it to do their bidding. Whether this vision will ever come true, is beyond our poor weak mortal powers to tell; it lies in the knees of the Gods. But should such an incredible thing ever come to pass, men will be able to send Orders for the payment of Money to the furthest corners of the earth in a single second, just as easily as they do now by Bills of Exchange.

“In such a case the **Res**, the Right of Action, will be created out of **Nothing**, and when it is paid the **Res** will be extinguished, it will be **annihilated**, it will go back into the **Nothing** from whence it came. I seriously advise you, my friend, to take back that part of your poem, and expunge that part of it, or you will have all the lawyers in the forum laughing at you.”

Now all these Abstract Rights are Wealth—they are **Res**. They are expressly termed **Res Incorporales** in Roman Law; Goods, Chattels, Incorporeal Chattels, Incorporeal Wealth in English Law. And what are they created out of? Do they come from the materials of the globe? And are they formed out of indestructible primordial atoms? When a Debt, or **Res**, is extinguished and annihilated, is it resolved into indestructible atoms to reappear in another form? What then becomes of the doctrine that **No Thing** can be created out of **Nothing**? And that **No Thing** can go back into **Nothing**?

As a matter of fact 99 per cent. of the commerce in this country is carried on by means of these Circulating Debts—Circulating **Res**. And these Incorporeal **Res** have exactly the same effect on prices, and produce exactly the same effects, as an equal amount of gold and silver. What then becomes of the doctrine that **No Thing** can act and function without a Body?

How is a Debt created? By the mere consent of two **Minds**. By the mere *fiat* of the Human Will. When two persons have agreed to create a Debt—whence does it come? Is it extracted from the materials of the globe? No! it is a valuable product, created out of the **Absolute Nothing** by the mere fiat of the **Human Will**, and when it is extinguished it is a valuable product **Decreated** into **Nothing**, by the mere fiat of the **Human Will**.

Hence we now see that there is a third source of Wealth, besides the Earth and the Human Mind—namely, the *Human Will*.

And by far the larger portion of Economic Quantities in this country are of this order—and merely the creation of the Human Will.

Thus, whereas Lucretius only recognised two species of *Res*—namely, Material Things, and the Void — there are in fact two other species—Knowledge, Labour, and Character, and Abstract Rights; and as both the last are now recognised as Wealth, all the supposed paradox of creating Wealth out of Nothing, which so puzzled the Economists, and still does many at the present day, vanishes.

Credit in Economics is very much analogous to Gravity in Dynamics. Gravity is force pure and simple, dissociated from any material agency, and for some time some even eminent men felt a difficulty in believing in it for that reason. Now Credit is Exchangeability pure and simple, dissociated from Labour and Materiality, and, therefore, some persons even yet feel a difficulty in believing it to be Wealth. But Credit is Wealth in Economics, just as Gravity is Force in Dynamics.

We now perceive the advantage of removing all notions of Labour and Materiality from the definition of Wealth, and adopting Exchangeability, or Purchasing Power, pure and simple, as the sole essence and principle of Wealth, and defining Wealth to be exclusively an **Exchangeable Right**.

We now see the answer to the doctrine of the Economists, that all Wealth must be formed out of the Materials of the globe, because **No Thing** can come out of **Nothing**.

We say that we are not concerned with **Material** substances at all—but only with the **Rights** to them. Some philosophers deny the existence of a Deity; other philosophers deny the existence of matter, but no philosopher will ever have the hardihood to deny that men can **Create**, can **Sell** or **Exchange**, and can **Annihilate**, **Rights**, and we have now established that Wealth is nothing but **Exchangeable Rights**.

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Contents.

	<i>Page</i>		<i>Page</i>
Economics, Travel & Reminiscence .	1	Fiction	5
Biography	2	„ (continued)	6
Biography, History, and Topography .	3	Works on Nature, Poetry	7
Miscellaneous, & Works for Children. .	4	Classical Reprints	8

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